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**GREAT CROPS
of STRAWBERRIES
AND HOW TO GROW THEM**

**R.M. KELLOGG CO.
THREE RIVERS, MICH.
1915**

Our Guaranty

IN order to avoid misunderstandings, we desire our patrons clearly to understand that our guaranty is strictly in respect of the quality of our plants—(1) that they are first-class in every way; (2) that the plants are freshly dug and carefully put up in damp packing material, and securely crated or wrapped (we never place any plants in cold storage, but they remain in the ground where grown until we dig them to fill our customers' orders); (3) that they are packed by the most careful methods to insure safe delivery; (4) that in all instances our plants are turned over to the transportation company, or postal service, in perfect condition; (5) that they are free from insects

and fungous diseases; (6) that they are true to name; and (7) that in all cases full count shall be supplied as per each order given. It is impossible for us to know what may occur to them after plants leave our hands either in the matter of delivery by transportation company, or postal service; or what soil and weather conditions they are to meet, or what treatment they are to receive at the hands of the individual purchaser. In short, we assume full responsibility for our plants up to the time they leave our hands, but beyond that point we can not and do not assume any responsibility.

All of our plants are carefully inspected by official representatives of the states of Michigan, Idaho and Oregon, and a certificate similar in character and purpose to the one issued by the state of Michigan is issued in the case of all three states. We quote herewith the

Michigan Certificate of Nursery Inspection

THIS is to certify that I have examined the nursery stock of R. M. Kellogg Co., Three Rivers, Mich., and find it apparently free from dangerous insects and dangerously contagious plant diseases.

L. R. TAFT,

State Inspector of Nurseries and Orchards.

We are exceedingly anxious that every customer shall realize his highest expectations in the direction of success with our plants, and we do everything in our power to assist him to attain that result. But, as we have said above, we do not hold ourselves responsible for plants after our control ceases. It will therefore be understood that when our plants are turned over to the transportation company we have no further control over them and our responsibility ends at that point. Should plants fail to arrive in good condition, it will be due to improper handling, careless treatment or delay while in transit. No complaint will be considered that is not made within five days following the receipt of plants. However, we have been growing and shipping strawberry plants for thirty-one years and in few instances do plants fail to reach the purchaser in the same ideal condition they leave our hands. We ship our plants to all parts of the United States, the Dominion of Canada, to many European countries and to Asia and Australia.

With our careful methods of labeling plants it would seem quite impossible that a mistake should occur in the matter of varieties, but we guarantee plants to be true to label with the express understanding that, if a mistake occurs, we are to be held responsible for no damages beyond the amount received for plants.

The fact that we receive orders from the same customers year after year is the best evidence of our success in the work of delivering high-grade plants in perfect condition—a fact further emphasized by the substantial increase, year by year, in the acreage devoted to the production of our Thoroughbred Pedigree strawberry plants.

Substitution

THIS year we have a very fine crop of plants as to quality, but as a result of the extraordinary drouth that affected so seriously nearly all parts of the country in both 1913 and 1914, our 1915 crop will be comparatively small. As certain varieties always sell far in excess of other varieties, this contingency must be reckoned with. When it comes time to ship your order, is it your wish, should we be sold out of any varieties that you have selected, that we substitute some other varieties of equal merit in their place? In making out your order be very explicit on this point. Note that two lines are provided on the order sheet for this purpose. If you give us permission to choose substitute varieties, simply say "Yes." If you prefer to select substitutes, please name them on these lines. If you positively say "No," we shall return your money for any varieties we are unable to supply. In case you write neither "Yes" or "No" on dotted line, we shall understand it is your desire that we use our judgment in the matter. Rest assured that we shall substitute only when it is necessary to do so, even though you give us the privilege to do so.

THIS Trade Mark is registered in the United States Patent Office at Washington, and any individual, firm or corporation, infringing upon our rights thus secured will be prosecuted according to the provisions of the law relating to trade marks.

The Meaning of Kellogg Service

SERVICE!

That is the keynote, the central purpose, the foundation principle, the end and aim and watchword of

this company. For more than thirty years the institution founded by R. M. Kellogg, and which still

bears his honored high standing, its of that great and world—for Kellogg in Europe, in as well as in section of Canada. Thus the Kellogg public includes the entire sweep of the vast surface of "this terrestrial ball," and the call to service is a mighty one, requiring the best that is to be had in our particular line of endeavor.

name, has been known throughout the horticultural world for its progressive methods, its sincere desire to serve the best interests growing public which represents the strawberry interests of the Kellogg Plants are grown and the Kellogg Way is known and practiced Asia, in Australasia, in the isles of the Atlantic and the Pacific, nearly every agricultural county in the United States, and in every ada. Thus the Kellogg public includes the entire sweep of the vast surface of "this terrestrial ball," and the call to service is a mighty one, requiring the best that is to be had in our particular line of endeavor.

The history of the Kellogg Company is the history in epitome of the entire strawberry world. When the Kellogg farm was established it was with the distinct purpose of broadening the scope of this field of endeavor and raising it to the dignity and importance it now has achieved. When our work was begun a carload of strawberries was something rarely known, and a shipment of that size was a wonderful event to be talked about for years as reflecting the magnitude and commercial prominence of the city from which it came. Now trainloads of strawberries are shipped daily to the larger markets of the country from many centers, and the strawberry crop in the United States ranks second only to the apple crop in magnitude and commercial importance. The part performed by this company in bringing about this extraordinary development is recognized everywhere, and has brought forth many expressions of appreciation and congratulation from the highest horticultural authorities in the land, and from the scientists of Europe as well.

We have proved to the world that the strawberry is as amenable to scientific culture and improvement by selection and breeding as is the apple tree in horticulture, or the horse, or cow or sheep or fowl in the animal kingdom. We set our own ideals and steadily have worked them out until, after more than thirty years of service to the public, this company stands the recognized authority in everything that relates to strawberry affairs.

That the great public we seek to serve appreciates our efforts is most gratifying. But more than that, it stimulates to even greater endeavor, and so, year after year, we come to our patrons with the latest discoveries in the horticultural world, or with new and approved varieties that are worth while and which create an actual improvement, permanent in character, in the strawberry realm, adding not only to the world's wealth as expressed in horticulture and commerce but to the world's joy and pleasure as well.

Thousands of growers, scattered from one end of this continent to the other, pay tribute to the Kellogg plants and the manner in which our service is extended to them. For our interest in a customer does not cease with the delivery of a consignment of plants. Our correspondence bureau is an ever-present help to those who require assistance and instruction, and its full resources always are at the command of those who buy our plants. And the cordial acknowledgements we receive from our friends the

KELLOGG OFFICE IN FOREGROUND AND F. E. BEATTY'S RESIDENCE IN GROVE

THE Kellogg office is a thing of beauty. It is built of white brick and completely covered with Japanese ivy. Mr. Beatty's residence, barn and garage set back in the grove. This is one of the most beautiful and best kept homes in southern Michigan, the product of a strawberry patch. The door of opportunity always is open.

letters of good fellowship and friendly feeling that come to us from day to day, "warm the cockles of the heart" and turn the day's task into pleasurable service. Indeed, the success of those who use the Kellogg plants and follow the Kellogg way is a source of as much gratification to us as are the profits derived from the business.

"Your plants are the best I have ever grown," writes one customer. "And the clear instruction you give, and the prompt replies you send to direct inquiries render it possible, even in the case of a novice like myself, to understand what to do and thus make success certain." Tributes of similar import come to us in great numbers. They prove our claims that the spirit and action of this company is one of broad, generous and freely given service to our patrons.

In the scientific department of the line of horticulture we represent, this company always has been the world's leader. We have faithfully worked out our own ideals months and years before submitting them to the public, thus insuring the people against loss while adding largely to their source of profits. Test after test, year after year, with some promising variety, only to find that it could not pass the standards we set for a Kellogg product, and that particular variety is rejected.

Then Comes a Kellogg's Prize

Then we secure, once in a great while, a Kellogg's Prize, pronounced by specialists the most perfect berry ever grown, in yield, in quality, in reliability, in beauty of form, in its extraordinary flavor, in its surpassing attractiveness when placed on the market. And something

else must be added to the record of this most extraordinary variety that scarcely may be said of any other variety ever originated, namely, its universal habitat.

From New Jersey comes this word:

"Kellogg's Prize is the greatest berry on earth. You have pronounced it 'wonderful.' You should have said 'magnificent.'"

A Michigan grower of more than thirty years' experience sends this tribute:

"Kellogg's Prize beats everything in the strawberry world. It is the best berry, considered from any and every point of view, I ever have grown or known. I never again expect to see its equal."

From the fertile valleys of Idaho, where irrigation is practiced and conditions unlike those experienced in the East are found, comes this statement based upon actual experience:

"Kellogg's Prize is the best berry I ever saw. Every ripe berry is a big one, and all look alike. It is the heaviest of fruited."

And from a grower whose home is only a few miles from the broad Pacific we receive this superlative word of praise:

"Kellogg's Prize leads every other variety on the Coast. It is the world's greatest strawberry."

Such tributes to its excellence, coming from growers on the Atlantic Coast, from the Middle West, from the Inter-Mountain States and from the Pacific Coast, leave little for us to say in behalf of that wonderful origination. One plant grower was so impressed with the virtues of Kellogg's Prize that he charged his patrons \$100.00 a thousand for them, or exactly ten times as much as we charged for the original stock—a recognition of its quality and productive powers we highly appreciate.

The Story of Kellogg's Premier

THIS year we present for the first time a variety which we believe will be as wonderful a yielder of early-season fruit as Kellogg's Prize has shown itself to be in the

THIS picture shows the result of pure seed, thorough soil preparation and careful cultivation. The ground was plowed after the strawberry plants were dug in May. After plowing, two tons of raw rock lime were spread evenly over the ground. The soil was harrowed at intervals of about every week until August, which destroyed all weed growing. The seed was then drilled with ordinary grain drill, which resulted in a perfect stand of alfalfa. In the spring the alfalfa field was cultivated twice with spring-tooth harrows and twice with one-horse weeder. The shocks tell the story. Alfalfa is a wonderful soil improver as well as a great feeding product. It puts soil in ideal condition for growing of fruitful strawberry plants. Soil fertilized by this wonderful legume is capable of producing plants of highest fruiting power.

A FIELD OF ALFALFA ON THE KELLOGG FARM GROWN THE KELLOGG WAY

A KELLOGG CULTIVATION, HOEING AND SPRAYING SCENE

WORK on Kellogg plants begins immediately after they are set out and continues throughout the entire season up until late in the fall, which keeps the plants in a healthy and continuously growing condition. Every department of our work is under the supervision of a foreman who understands his particular line of work. It is work that insures plants of Kellogg Quality and that makes assurance doubly sure to our customers. Nothing is neglected or forgotten that will assist in securing these results. Progress is the motto of this company and we do not hesitate to try out new ideas whenever they promise improvement. That is why Kellogg plants always are the Best plants—plants that unflinchingly give complete satisfaction when grown under soil and cultural conditions now recognized as The Kellogg Way.

late season. So extraordinary is it that we have given it the name of "Kellogg's Premier." Like Kellogg's Prize, our Premier was originated in Illinois, and there are many features—as to yield, beauty of form, etc.—that promise to make it one of the most notable strawberry originations of recent years.

In telling the story of Kellogg's Premier we shall be conservative, just as we have been in the case of all other new varieties we have introduced. The story is simply this:

In 1911 fifty plants of this variety were sent to us by Mr. Edwin H. Riehl, who conducts a sub-experiment station for the state of Illinois. When sending us these plants Mr. Riehl wrote that he had tested hundreds of varieties and that this variety outclassed every other early variety he ever had known. Our first crop came in 1912, and it was a sight to behold. The fruit piled up around the vines in a manner that was astonishing. The berries were the largest and most beautifully formed we ever have seen on any early variety, and the fruit was deeply and richly colored.

In the spring of 1912 we transferred fifty runner plants to another testing block, where about 120 varieties were in competition. These gave us a two-year-old row and a one-year-old row to fruit in 1913. During May of that year we had frosts repeatedly, together with very dry weather, and again on the 7th, 8th and 9th of June we had heavy frosts with the drouth still continuing; but in spite of these very unfavorable weather conditions the Premier gave us a splendid crop of perfectly formed berries. The two-year-old plants in that year outclassed the one-year-old plants.

In 1914 Kellogg's Premier came forward with its usually big crop of beautifully formed and richly colored fruit. Each year we have received the most glowing reports from Mr. Riehl in regard to the performance of this variety on his grounds. And here is the most interesting part of our story. The soil on which Mr. Riehl grew these berries was composed of a very heavy and gummy clay, while our soil is a rich sandy loam, composed of about one-fourth clay and three-fourths sandy loam.

The fact that Kellogg's Premier outclassed all other early varieties with which it competed here on our farms, added to the fact that it outclassed all other early varieties, both standard and new, in the heavy clay

soils of Illinois, is pretty good evidence that it is destined to be a universal favorite.

We have only one regret, and that is that we did not set a larger acreage to the Kellogg's Premier plants; but we have decided to set in 1915 a larger acreage to this variety than to any other early variety we have listed. We will do this because we are confident that Kellogg's Premier is without doubt the most wonderful early variety ever originated and that, after it has been tested, it will be more largely planted by growers throughout the country than any other early variety.

Kellogg's Premier gives us the best and most profitable early variety ever originated, while Kellogg's Prize is without doubt the most wonderful late variety ever introduced. We are now seeking for an extra-early variety that will outclass all other varieties of this season, and we make a standing offer of \$1,000 for a fall-bearer that will surpass any other fall-bearing variety now on the market. This will give us a quartet of the most wonderful varieties ever known, and our quest will not cease until we do secure this quartet.

Our Wonderful Ever-Bearers

IN this connection we desire to call special attention to the varieties known as ever-bearing, or fall-bearing plants. The first of these remarkable plants, that seem destined to revolutionize the strawberry world and increase beyond measure the production of this fruit, was discovered growing on the plantation of Samuel Cooper of New York in 1899. It was fortunate that this gift of nature came to one so well fitted by training and experience to develop the few plants into something destined to perform such large service. Mr. Cooper called his discovery the "Pan-American," and from that variety, of little value so far as fruit quality is concerned, has sprung a noble progeny, due to the devotion and scientific skill of such men as Mr. Cooper, Harlow Rockhill of Iowa, Edwin H. Riehl of Illinois, and the late S. H. Warren of Massachusetts, to all of whom we take pleasure in acknowledging the debt the world owes to them for results accomplished.

Mr. Cooper's latest contribution of varieties of the ever-bearing sorts is com-

THIS photo-illustration will give some idea of the great productiveness of the Kellogg's Pedigree plants. However, a photograph cannot do these plants justice because the berries cannot be shown full size, neither can the beautiful color be shown, and the greater part of the berries are hidden by the massive foliage. With such plants as these it is an easy matter to become the first fiddler in your locality. It is only from such plants as these that first quality strawberries may be produced.

A ROW OF KELLOGG PEDIGREE PLANTS IN FULL FRUIT

A FIELD SCENE OF THE KELLOGG PEDIGREE MOTHER PLANTS

A GLANCE at this illustration should convince the most skeptical that such highly developed mother plants will certainly produce runner plants of the highest fruiting quality. All runners are removed from these plants until July 1st, which gives the mother plants the opportunity to become fully developed before undergoing the strain of runner production. It is now conceded by all horticultural experts that runner plants inherit the most characteristic and desirable traits from the mother plants which produce them. It is, therefore, very important to have strong, vigorous mother plants in order to secure runner plants that will become great yielders of first-quality fruit.

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KELLOGG'S PRIZE, THE GREATEST OF THE LATE PISTILLATES

WE introduced Kellogg's Prize to the strawberry world in 1913. Reports concerning the performance of that variety in that season came largely from our own observations, and were in every respect confirmative of our highest expectations. But in 1914, after the people had opportunity to discover its extraordinary qualities, there came to us from all sections of the country such a grand chorus of praise as never had been given to any other variety in history. These reports come direct from the fields of our customers, and the descriptive word most frequently applied is "magnificent." The highest claims we ever have made concerning this variety are more than verified in the experiences of our customers. Kellogg's Prize is a pistillate variety, with a fruiting season extending over a longer period of time than any other variety with which we are familiar. In what we may designate as the latitude of Chicago, and extending almost from coast to coast, this extraordinary variety begins to bear in mid-June and continues until after mid-July. It thrives in soils of every class, and yields immense quantities of large, perfectly formed berries, highly colored from center to circumference, its golden seeds lending a gloss to the surface of surpassing brilliancy and beauty. There is no other berry having a flavor of greater delicacy. Here we have a combination of excellences so rare as to put any other variety out of the comparison. The foliage is ample, befitting the character of so noble a variety, and the calyx is large, in complete harmony with its other striking features. We can without hesitation recommend this variety as the principal crop in any field, confident that every reasonable expectation will be more than satisfied. Customers everywhere should order generously of this greatest of pistillates.

posed of a trio which holds out fine promise of success. These three varieties are known respectively as "Advance," "Forward" and "Onward," and our confidence in Mr. Cooper has led us to add to our 1915 list these three varieties in the full assurance that they will

prove to be all that their propagator claims for them.

We take much satisfaction in referring to the extraordinary success we have had on our three farms—Michigan, Idaho and Oregon—with the ever-bearers, and to the fine re-

KELLOGG'S PRIZE "MAGNIFICENT"!

R. M. Kellogg Co.,
Three Rivers, Mich.

Atco, N. J., May 25, 1914.

GENTLEMEN: I am truly glad I have got from you Kellogg's Prize. It is the greatest berry on earth. The only mistake you made was in pronouncing it "wonderful." You should have said "MAGNIFICENT!"

Yours truly,

W. H. OPENSHAW.

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KELLOGG THOROUGHBREDS GROWN UNDER SUB-IRRIGATION

THIS field of Kellogg plants was set out in the early spring of 1913 on the grounds of S. D. Newman of Syracuse, Neb. Mr. Newman lives in the region where some form of irrigation is necessary and is carrying on a very interesting experiment with sub-irrigation. The photograph from which this illustration is made was taken during the fruiting season of 1914, and although there was no rain from June 7th until September 14th, 1913, it would be difficult to find anywhere a more thrifty looking lot of plants than are here shown. In 1912 Mr. Newman harvested 196 quarts of berries from a patch of Senator Dunlaps only 18x20 feet in size, or at the rate of 27,000 quarts per acre, suggesting the possibilities of this great field.

ports received from those who have purchased and grown the Kellogg strain of Americus, Superb, Progressive and Productive plants during the seasons of 1913 and 1914.

That these plants are as reliable and as fixed in quality and habit as are the standard varieties is no longer to be doubted, and our confidence in them is so great that we have grown them in ample numbers for the 1915 trade, and do not hesitate to advise our patrons to set as generously of them as purse and area of land will permit. We are confident that the profits from these plants will be very large, and the service to the public even larger—for the world never tires of good strawberries, and always has a warm place in its big heart and money in its purse for those who grow them.

A Thousand Dollars An Acre

COL. ROLAND MORRILL, one of the best-known horticulturists in the United States, recently visited our branch farm at Twin Falls, Idaho. His visit was a most timely one, for just then we were gathering ever-bearing strawberries by the bushel, and Col. Morrill tells us that the scene was one the like of which he never before had had the

pleasure of witnessing. He was especially impressed with the quality of the fruit, both as to flavor and size, and never before had he seen such a superabundance of beautiful strawberries. "Any man," said Col. Morrill in reporting his observations to us, "who knows anything about strawberry culture ought easily to make a thousand dollars an acre each season from such fields as I saw on your farms at Twin Falls. I was especially struck with the tremendous productive powers of the Superb and Progressive ever-bearing plants. They open up a vast field to intelligent horticulture, and I am convinced that we have just begun to appreciate the influence of these latter-day originations upon the strawberry world as a whole."

Science Confirms the Kellogg Idea

RECENTLY we have had a striking confirmation of the Kellogg theories regarding the methods essential to the propagation of strawberry plants that not only check tendencies toward deterioration, but which positively aid in improving the plants and to increase their productiveness.

In the month of June, 1914, we had a

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R. M. KELLOGG CO.'S SELECTION BED AT THREE RIVERS, MICH.

THIS illustration shows our method of selection of plants for our propagating fields. Every variety is staked, and each individual mother plant carefully observed with a view to improving each variety by selecting from only those that show the most points of excellence. Selection and restriction is what made the Kellogg plants famous. No drones among the Kellogg Pedigree plants—every plant is a heavy fruiter.

visit from Lee Blynn Scott, an old-time graduate of the Michigan Agricultural College, who is now associated with A. D. Shamel in one of the most remarkable lines of horticultural work ever undertaken—a work that is being conducted with great satisfaction to the fruit interests of California. Prof. Shamel has for the last fifteen years been recognized as one of the prominent scientists connected with the United States Department of Agriculture at Washington. Some years ago he was sent to California to make investigations and experiments along the line of field agriculture. While looking over a very large orange orchard he was informed by the owner that all of the trees on that great plantation were the offspring of two trees, and that it was the most perfect orchard of its kind in California, which was equivalent to saying that it was the most perfect orchard in the world.

Mr. Shamel became so interested in that statement that he began a series of investigations, the result of which has taken him entirely out of the line of field agriculture and into the work of advanced horticulture, where he has succeeded in accomplishing a wonderful work in the improvement of orchard conditions throughout that great fruit state.

When Mr. Scott called upon us in June he was not a little surprised to learn that the R. M. Kellogg Company had been practicing for more than thirty years the identical methods which are now accomplishing such great results in California.

Every long-time patron of this company knows that year after year we have insisted that the very foundation of the strength and fruiting powers of the strawberry plant lies in the selection of mother plants and their method of propagation; in other words, that only mother plants of highest fruiting powers should be transplanted with a view to reproduction.

Mr. Scott told us that this was exactly the position now held by scientific horticulturists who were engaged in the work of improving orchard conditions in California, and cited the fact that both among the citrus and deciduous orchards of California it has been demonstrated beyond all doubt that those trees which make the largest quantity of budding wood are the least prolific in fruit, and that those trees that make the smallest quantity of budding wood are those which yield the heaviest crops of fruit.

This, as we say, confirms the position we have held and demonstrated for so many years.

We always have insisted that plant life of all kinds reproduces itself; that where plants are propagated in the ordinary way drone plants predominate, because drone mother plants with weak fruit-producing organisms multiply runners more rapidly than mother plants with strong and perfectly developed fruit-producing organisms. This explains why the common grown strawberry plants deteriorate, or "run out," as many growers express it. The same law of reproduction insures a steady improvement in

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FRANK HUNTER'S STRAWBERRY FIELD AT THREE RIVERS

JUST across the way to the west of the Kellogg Farms at Three Rivers is the field of Frank Hunter, who has been a successful strawberry grower for more than twenty years. He does not hesitate to say that our plants are the best in the world, and he declares that "Kellogg's Prize" is the noblest variety ever originated. Mr. Hunter is an adept in the work, and always tops the market at home and in nearby cities with his product. The field itself is the most eloquent testimony to his great ability as a strawberry grower.

the quality and productive powers in the plants propagated from strong, vigorous, healthy mother plants.

It is gratifying, indeed, to have this complete confirmation of the scientific accuracy of our position and methods, but more than all that is the satisfaction we take in the knowledge that the world has at last begun to realize the great truth and that there no longer is the slightest excuse for the setting of another orchard to drone trees or another field of strawberries to unproductive plants.

No breeder of live stock but knows that the super-milch cow comes from a fine strain of milkers. There is no live-stock breeder in the world today but comprehends this truth. Is there any reason why the laws of nature shall not operate in the same manner in the case of all forms of plant life? Yet there are those who do not hesitate to set great orchards of trees that require many years to develop into bearers of fruit, only to find at the end of all their investment of labor and time and money and costly land—all this has been lost to them just because they do not obey the simplest laws of generous Mother Nature. All over this

country today are vast orchards that yield no compensating crops of fruit, because drone trees predominate. This could be changed within a few years of time and every orchard be made to produce generous crops of high-class fruit simply by adopting the methods we have employed for more than thirty years on the Kellogg farms.

Why then persist in setting out strawberry plants of unknown ancestry, or trees, or flowers, or any other thing, that does not come to you with the absolute assurance of quality and capacity for large production?

A Word of Appreciation

IN presenting the 1915 issue of "Great Crops of Strawberries" we think it due our patrons that we give expression to the sincere gratitude we feel because of their faithful friendship and more than generous patronage, as well as for the countless words and acts of courtesy which have come to us from them.

The spirit of friendliness that is shown us; the generous co-operation that renders the dulllest business a source of inspiration to

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PLANTS THAT GREW STRAWBERRIES AT THE RATE OF 9,000 QUARTS PER ACRE

THIS scene represents a portion of the very well-cared-for strawberry patch of Delbert Neese of Whites-town, Ind. The entire patch occupies 42x112 feet, and from this small plot Mr. Neese grew 850 quarts of fancy berries composed principally of Senator Dunlap and Bubach. That the plants were extraordinarily fine Mr. Neese remarks in his letter, and reports that out of the 900 plants delivered all but thirteen grew to perfection. This is a typical record of Kellogg plants. They are bred for service and honor their breeding.

better endeavor—these have been ours to enjoy and from them we have drawn pleasure and encouragement. It would be unfair to them if we did not render here some acknowledgment of our obligations. And it would be quite as unfair to ourselves if we failed to take account of those side-lights of trade in which the personal element for the moment succeeds to dry business routine.

One New York woman who is thoroughly interested in strawberry growing, but whose time is greatly preoccupied with her manifold duties, appears to be almost glad that "An accident has given me the long-coveted opportunity," to quote from her letter, "of having a chat regarding my strawberries." And she proceeds to tell in a most entertaining manner of her experience with six of the Kellogg varieties, concluding as follows: "Chesapeake—big, beautiful, delicious, spicy—all of the best qualities rolled up in one handsome, perfect berry. Strong, sturdy stems; rich, green, abundant foliage, and the best drought resister!" And so on, throughout the list of her plants, her comments are valuable, aiding us not a little to be of

service to other customers as well as to herself.

And from another woman who finds her strawberries a source of keen delight, comes a list of names of her friends with request that we mail to each of them a catalogue, and expressing the hope that they "may become customers of yours. Your plants which I purchased three years ago have produced the finest flavored berries we ever have tasted."

"I had the pleasure of buying plants from you in 1902, when in Texas," writes W. Garland Brown, a member of the New York Stock Exchange, "and in 1905-06 in Oklahoma, and now wish to try them in New York. Needless to say, I know what service your plants give. I would not have any others." This letter suggests the universal success of our plants, and is typical of hundreds of letters we receive annually from those who, no matter where their habitation may be or how often they change their abiding place, never fail to have Kellogg Pedigree plants follow them.

And from generation to generation members of the same family continue the "Kel-

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KELLOGG THOROUGHBREDS IN THE FIELD OF J. C. TARRANCE, MOUND CITY, KANSAS

IN making a report to the Kellogg Company of the performance of his strawberry plants in the spring of 1914, Mr. Tarrance refers to the extraordinary vitality of the plants as evidenced by the way in which they passed through the "hottest and driest summer ever experienced in this part of the country," and adds the following comment. "As a result of my own practical experience I stand ready to verify every statement you people make concerning your plants, and the delicious fruit we have enjoyed this season is the best evidence of the sincerity of your claims. I assure you I appreciate every word written in your catalog for the benefit of the strawberry world." Kellogg plants show their mettle under the most trying conditions.

logg habit," as is indicated in a letter from a St. Louis business man, Mr. R. W. Mottaz, who writes, when forwarding a generous order for plants: "My father ordered plants from you ten years ago, and they were the only plants for him."

Another tribute of similar import comes to us from W. M. Stryker, cashier of the Security State Bank of Arkansas City, Kansas. He says: "Years ago, when I was quite a youngster, my father, Ward M. Stryker, used to buy strawberry plants of you, and the berries he raised from those plants were the nicest berries I ever saw; and with the memory of those berries, I am going to look for some nice ones from the plants just received when the proper time comes."

Mrs. Theodore True of Gratiot, Wis., sends us this message of confidence as a result of past experience: "When I was at home, a young girl, we ordered our plants from Kellogg's, and had good success with them."

From the wife of an Ohio rural mail carrier comes the following: "Enclosed find money order for Kellogg plants that we always have found as represented, and if we are as successful as we always have been in the past, you will get some snap-shots of the

patch, and also of the tillers of the soil. And you needn't look for any boys in the picture—it will be what Mother and four little girls, ranging in age from 6 to 13 years, can do. We are going to have some pin money of our own."

In a letter accompanying an order for plants, C. E. Finville of Maitland, Mo., puts the case in a nutshell when he says: "As there are some of your plants growing in our town, we do not need any further recommendation, for they recommend themselves. So please ship me the plants as listed." There is a whole volume in that brief and pithy statement of the reason why he buys Kellogg plants. Seeing is more than believing—it is knowing.

Postmaster George A. Allen of Clay Center, Neb., in sending us a supplementary order for a friend, adds this encouraging word: "I want to write to you gentlemen to say that I have been getting plants from you for several years, and also for my neighbors; and you have been so true and so satisfactory in your dealings that every year my neighbors want to know if I am sending for more plants, as they always want some more. Your honesty, fairness and absolute relia-

A KELLOGG PLANT IN FULL BLOOM

A KELLOGG MOTHER PLANT

A KELLOGG PLANT IN FULL FRUIT

THIS combination of plants indicates the wonderful fruiting powers of the Kellogg Pedigree plants. Note the root and crown development of the mother plant in center of engravings. Also note the perfect development of flowers. The plant to the left is a typical mother in bloom, and the one on the right is the same plant in full fruit. Every blossom makes a big red berry. Growers who set such plants and give them such care as plants of this quality merit need never doubt as to results.

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

Copyright 1914, by R. M. Kellogg Co., Three Rivers, Mich.

JOE JOHNSON, A REMARKABLE LATE VARIETY

THIS is a fine addition to the list of extremely late bisexuals, and promises to become a universal favorite. It was originated in Maryland, and comes to us with the highest recommendation from its sponsors. The fruit is very large and beautifully formed; its color is brilliant red, and as the calyx is bright green the contrast is strikingly beautiful. The flavor is delicious, and it is equally desirable as a table or canning berry. It is a strong bisexual and an excellent fertilizer of pistillate varieties. As a shipper it is excelled by no variety known. It is a generous plant-maker, which is a favorable distinction when compared with Chesapeake, as the latter variety makes few runners except in very fertile soils. One of the leading nurserymen in the east says of this variety: "The Joe Johnson will without doubt become the leading late bisexual variety as soon as enough plants can be grown to get it well introduced." One grower who has tried it out thoroughly says of its performance in 1914: "Joe Johnson showed up splendidly again this summer, bringing top prices every picking." Everyone should test out this extraordinary variety, which is grown only at Three Rivers. The value of trying new varieties may not be over-estimated.

bility as to good plants, true to name, has won us. If I were setting out a field of fifty acres, you would get my order."

Thousands of our customers have only a limited area in which to grow strawberries, but they get a lot of satisfaction and no little amount of cash out of their work along this line. Writing us in April, 1914, Fields M. Duncan of Liberty, Mo., says: "I received the shipment of strawberry plants on the 8th that you shipped on the 6th. They were in perfect condition, owing to your careful packing, and they had the finest roots and crowns I ever saw on plants. Two years ago I set out 100 plants each of Senator Dunlap, Bubach and Gandy, and last summer we picked fourteen crates of twenty-four boxes each (336 quarts) besides the quantity consumed by the family. This year I am testing out seven others of your varieties, and shall send you a report after they fruit. Thanks for your courteous treatment."

In the spring of 1913 we sent an order of plants to Randall Culite of Honing, England, and under date of May 9, 1914, Mr. Culite wrote us as follows: "You will probably like to know how your strawberry plants arrived. Considering the distance they had

to come, and the lateness of the date I ordered them, they have done very well indeed. They are not all alive, of course, but I shall have a nice lot, and when they are filled up with runners they ought to form a first-class bed. The roots certainly are capital, and I think it does you credit, getting them over here in such fine condition."

And Madame Lombard, who dwells in the beautiful chateau of Trevano in southern Switzerland, wrote us December 26, 1913: "The strawberry plants arrived on the 19th in a temperature of summer time. They were a trifle dry (the customs officials held them for two weeks), but I am sure the bulk of them will be flourishing and strong. The old plants (those shipped in the spring of 1913) have blossoms and fruit on them now, the weather is so warm."

We might go on and fill the book with the cheery words that come to us from our customers. That we appreciate and value them we need not say. They come to us from every section of our own land and from many remote sections of the earth. They express the pleasure taken with our plants, and they tell us of the confidence they have in our methods, as to the horticultural practices em-

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

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BUBACH, A PRIME FAVORITE IN MANY SECTIONS

THIS old and popular variety has a great reputation as a money-maker and commands the market as do few varieties. Famous for its large yields, mammoth in size and beautiful in color, the quality of the fruit is quite as remarkable as its fine appearance. The berries are very large and meaty, with bright-red surface. In form the fruit ranges from the conical to thick and broad. The bright-red color of the exterior extends throughout the berry. Bubach has a large calyx with medium-sized stems. Foliage is a glossy dark green of spreading habit and very short fruit and leaf stems. We have grown Bubach on black soil, on clay and on sandy loam, and in every instance this variety has given entirely satisfactory results. This is the twenty-second year we have had Bubach in our breeding beds, and every year notes a marked increase in its popularity. It is especially favored by the growers of the Southwest. Grown only at Three Rivers.

ployed in producing the plants, and the commercial measures adopted in the direction of this great enterprise, as well as for the assistance we render patrons through our free service bureau. For all this we are sincerely grateful to our patron friends and take this opportunity once more to tell them so. And we again invite our patrons to call upon us at any time they feel we may help them out by suggestions or advice.

Lettuce Between Strawberries

OFTEN we are asked if it is not possible to grow some crop between strawberry rows so as to make the land yield something while the strawberry plants are getting ready to grow a crop. As a rule we have discouraged the idea, as the strawberry is jealous of its rights, and does not take kindly to the idea of dividing up the plant food in the soil. But we recently have come across the experience of a "York State" market gardener that leads us to the belief that his particular plan will work out wherever rich soil may be had; so we give our patrons the benefit of this man's experience and they may use it or reject it just as they choose. He says:

"It always has been a puzzle to find a crop that could be successfully grown in conjunction with a newly set strawberry bed, and this year we placed a plant of Hanson lettuce between each strawberry plant, which we set 30 inches between plants and 3 feet between the rows. This proved to be the best plan we have ever tried from a financial standpoint. Practically

every plant made a head, which sold for 5 to 6 cents; in fact, the lettuce sold faster than it could be headed up. We have tried growing many kinds of vegetables in strawberries, but they would either shade the berry plants or remain too long before maturity, or they had some other fault. We had almost given up the idea with the intention of allowing the strawberry plants full sway, thereby receiving no income from the land for one year. The lesson we have learned from this scheme is that instead of getting but one crop in two years we get a crop every year. An acre planted 2½ by 3 feet will hold nearly 6,000 plants; at five cents per head you can figure it up yourself. Practically all the extra labor required is the setting of the plants and you get a profit of over \$275 per acre, for \$25 will cover all expenses, I am sure.

"Of course, the ground must necessarily be rich for the lettuce to make those immense heads that take the fancy of the buyer and I have never been able to get the soil too rich for strawberries. A head of lettuce (Hanson) will, if well grown, occupy all the space between the two berry plants, but will be out of the way before runners have started, and I am sure no injury has been done; for my field of plants now looks fine and promises a good crop next spring."

EXPERIENCE is profitable, but, experiment may prove costly. Let us give you the benefit of our more than thirty years' experience in strawberry growing. It may save you many an expensive error if you will do so.

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

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A FINE TABLE BERRY AND GREATEST OF THE CANNERS

WARFIELD is favorably known from the Atlantic to the Pacific and from the Gulf to Hudson's Bay, and combines so many excellent qualities that it would be difficult to enumerate them all. It is a large, beautiful-shaped berry, with glossy dark-red exterior that does not fade or become dull after picking. This characteristic continues even after it is preserved, which is one reason for its great popularity as a canner. The flesh is a rich dark-red clear to its center; it is very juicy and just tart enough to give it a fine relish. The neat, slender stem and green calyx join the berry in such a way as to form a short neck, which adds beauty to the fruit. As a shipper it has no superior, finishing a long journey with the same bright luster that marks it when picked freshly from the vines. An early berry, the Warfield has a very long fruiting season, yielding a large picking every day for several weeks. This is its twenty-seventh year in our breeding beds. Grown on all our farms. Every grower should order generously of this universally favored variety.

Great Crops of Strawberries and How to Grow Them

IN DESCRIBING the Kellogg way of growing great crops of strawberries we shall do our best to make every detail of the work so plain that every man, woman, boy and girl may understand it, and if you will carefully read and study these cultural methods you will have no trouble in winning the same success that has made the name of Kellogg famous throughout the world. And to emphasize this statement, let us say that when you follow the Kellogg Way you may be sure that you are on the right road to big crops of fancy fruit.

No other crop thrives under neglect and unfavorable conditions like the strawberry. At the same time no other crop will produce so abundantly as strawberries grown under proper methods.

During our thirty-one years' experience in this most delightful and profitable line of work we have learned that the big profits are made by growers who follow intensive cultural methods. It has been said that if it does not pay to do a thing well it does not pay to do it at all. This especially applies to the strawberry business. Every town in this country offers a splendid opportunity for the up-to-date, far-sighted strawberry grower. There never yet has been enough fancy strawberries grown

to supply the demand, and it requires less effort to sell fancy strawberries at a big price than it does to sell inferior fruit at a price that results in a loss to the grower. Government reports show that strawberries, when grown under proper methods, yield more dollars per acre and give quicker returns than any other crop. Growers who are following the Kellogg way are realizing from \$500 to \$1,200 per acre.

Plant Quality of First Importance

ONE of the all-important features of strawberry growing is plant quality. When we understand that runner plants inherit the characteristics of the mother plants which produce them, we will then realize the importance of setting plants that have been produced by carefully selected and highly bred mother plants.

Many growers make the mistake of taking plants from their fruiting beds, and many other growers buy cheap plants just because they cost less than highly bred plants. If you cannot afford to set the best plants the world produces, you cannot afford to set any plants at all.

The difference in the cost of high-quality

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EARLY OZARK, LEADER OF THE EXTRA-EARLIES

THE reputation of Early Ozark as one of the earliest varieties ever originated increases as the public becomes acquainted with its merits in that regard. But extra-earliness is not its only virtue, for in size and flavor it ranks with varieties of any of the seasons. Early Ozark is a cross of Excelsior and Aroma, and combines the excellent characteristics so pronounced in the case of both of these varieties. It has the Excelsior's earliness with the sweetness of Aroma, which makes a very unusual and valuable combination. It is a staminate, unusually strong in pollen, and therefore excellent for mating purposes; very productive and of firm texture, its qualities as a yielder and shipper make it popular with commercial growers. Although of comparatively recent origination, it already has taken a place in the front ranks of the extra-early varieties. We advise our friends to secure a sufficient number of the plants of the Early Ozark to give it a thorough test. We know from experience that it will pay generously. Grown on all our farms.

plants and commonly grown plants for one acre amounts to only a few dollars, while the difference in the net profits is something enormous. Government statistics show the average yield of strawberries to be 1,700 quarts per acre, while reports from growers who use the Kellogg Pedigree plants show yields ranging from 6,000 to 16,000 quarts per acre.

The cost of preparing the land and cultivating an acre of plants is the same whether you get seventeen hundred quarts or sixteen thousand quarts. The few dollars you save in the first cost of cheap plants means a shortage of many dollars at harvest time.

There are two ways to grow strawberry plants: One way is to fix the selling price in advance and then grow the plants as cheaply as possible so they may be marketed at that price. The other way (the Kellogg way) is to grow the best plants that can be grown,

regardless of selling price, find out what it costs to produce and market such plants, add a reasonable profit and fix the price accordingly.

How Kellogg Plants Are Developed

TO GIVE you a better understanding of the quality of the Kellogg Pedigree plants we will enumerate a few of the most important features employed in developing such plants.

First. The Kellogg Pedigree plants are produced by mother plants of the highest fruiting quality.

Second. The plants are grown in soil especially prepared and treated to bring them into full maturity. Phosphorus, potassium and nitrogen in proportions to suit the requirements of the plants are thoroughly incorporated into the soil in addition to large quan-

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ONE-FOURTH ACRE OF STRAWBERRIES YIELDS \$208.44

IN his letter accompanying the above photograph Mr. D. M. Ramsey of Saxton, Pa., says: "This is a real picture of my strawberry plot, size $32\frac{1}{2} \times 130$ feet, which is planted to Kellogg's select plants. I have set out Kellogg plants during the last twelve years and have received good returns from them every year. This year I marketed 1300 quarts of berries at \$3.86 per crate. Many of these berries measured from $2\frac{1}{4}$ to $2\frac{3}{4}$ inches in diameter and were pronounced by my customers to be the nicest they ever had seen. Owing to the quality of these berries I was able to market the entire crop in a small village of 1,000 inhabitants and easily could have sold as many more." There never is any difficulty in marketing berries of Kellogg quality.

titles of humus, so that the plants may not want for any of the essential plant-building materials throughout the entire growing season.

Third. The fields are cultivated and hoed intensively from the time plants are set until they begin to build up their fruit-bud system, which is late in the fall. With our cultural methods, plenty of moisture is retained in the soil to keep the plants in a strong and perfect growing condition. It is very detrimental to the plants to have their growth checked at any time during the growing period.

Fourth. The entire fields are sprayed repeatedly with fungicides and insecticides, to prevent any development of plant disease or attack by insects.

Fifth. All runners are cut off until about July 1st. This relieves the mother plants from the strain of runner making, giving them an opportunity to build up a mammoth crown and foliage system before taking up the task of reproduction. Such strong and perfectly developed mother plants as we produce under this system are sure to send out runner plants of the same character. We also remove all fruit buds before they open into blossoms and thus prevent any weakness from pollen secre-

tion or seed production. See illustration on page 8.

Sixth. The plants are mulched late in the fall to prevent any injury from alternate freezing and thawing during winter.

Seventh. The Kellogg plants are grown in the North, where they remain perfectly dormant from December 1st until April 1st. This four months' complete rest is very important, as it gives the roots an opportunity to callous, and when set into the warm, moist soil the following spring the dormant, calloused roots start their feeders immediately after they are set and, if properly handled, every plant will grow, no matter what distance they are shipped.

During the early days of the shipping season we find it is not well to remove all of the wire roots and leaves of the plants, because to do so results in the skinning of the crowns of the plants, sometimes resulting in serious injury to them. We explain this here so that our friends will understand the reason why this course is followed.

In short, we do everything at the right time and in the right manner. Our aim is to produce and deliver the most productive plants that can be grown, and the price always will

KELLOGG PLANTS SURPASS ALL OTHERS

WRITING under date of November 1, 1913, C. H. Fenton of Randolph, Ohio, says: "I am writing to tell you about the success I have had with the strawberry plants I bought of you last spring. I wish you could see the patch. I never had plants do better—some of the plants have made as many as eight crowns. They are grown under the hill system. They are the nicest plants in this town, and some good judges say they beat anything they ever saw." Thousands of customers send us testimonials of this gratifying nature.

be consistent with their quality and productive value.

Soil Preparation

THE NEXT important feature of strawberry growing is soil preparation. If your soil is in a healthy and productive condition, so much in your favor. If it is sick and run down, it must be treated in a manner that will bring it back into a profit-making condition. Virgin soil is mellow and rich because nature has filled it with decayed matter (humus). The same thing will make wornout soil mellow and productive.

Manure. Barnyard manure makes an ideal fertilizer, because it carries with it essential plant-building elements and stores the soil with humus. All animal manures are good for strawberries, and they may be applied any time during the fall and winter months when there is not much else to do. The winter rains and melting snows will carry the leachings of the manure into the soil, and there will be but little waste unless the ground is very sloping. Hilly and sloping ground should be manured at a time when it can be plowed under soon after spreading, and by reploting in the spring before planting, the manure will be brought to the surface where it may be well incorporated with the top soil.

Other Animal Fertilizers. As many of our customers are engaged to a greater or less extent in poultry raising, the question of the value as a fertilizer of chicken droppings frequently arises. They are excellent, but should be handled with care. If they are mixed with two parts of dry earth or dust to one part of droppings, they will better retain their rich-

ness, and they will be diluted to a proper degree for application to the soil. Heavy with nitrogen, chicken droppings need to be modified in this way before applying, and then we advise that they be scattered lightly over the surface of the garden plot and plowed under, so that their excessive richness in this element may not result in injury. Droppings are strong also in phosphorus, but contain little potassium.

Another animal fertilizer that has of late years become very popular is pulverized sheep manure. Scattered at the rate of 1,500 to 2,000 pounds to the acre, it is found to be ideal in the producing of quick as well as permanent results. This fertilizer is perfectly desiccated before pulverizing, so that all weed seeds are eliminated.

Legumes. If you cannot get manure, you will find legume crops ideal soil improvers. Cow peas and soy beans may be drilled at the rate of five pecks per acre. Sow in June or early July. The ground should be plowed early and harrowed at intervals of every week for several weeks before planting, to destroy weed growth. Winter vetch (also known as sand vetch and hairy vetch) is an ideal legume and is one of our favorites, because it may be sown late in the fall. From twenty to twenty-five pounds per acre of seed will be sufficient. Sowing in the fall allows the berry grower to plow his old fruiting bed after berries are picked and to work the ground thoroughly before seeding. It may be sown as late as September 1st. The vetch grows during winter when the ground is not frozen, and in the spring it develops very rapidly.

Experiments show that full benefit is not derived from winter vetch until it fully ma-

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SUPERB STRAWBERRIES GROWN AT THREE RIVERS

THE above represents a scene on the home grounds of W. H. Burke, secretary and treasurer of the R. M. Kellogg Co. These plants began to fruit early in June and continued, with only a short rest in mid-summer, until very late in the fall. The strawberry shows the shape of the fruit and suggests the large size to which the berries develop. The berry is under full size. The Superb is a leader among Ever-bearing varieties. One hundred and twenty crates were picked and sold from less than one-half acre at our Idaho farm during July and August, 1914, notwithstanding the fact that a force was employed to keep off the blossoms and fruit stems. You can't hold Superb down. This great ever-bearer is grown at all of our farms.

tures. For this reason, we never plow our vetch under until it is in full bloom. This legume will grow from four to six feet in length, and will yield from four to five tons per acre. All this vegetable matter, together with the great quantities of nitrogen it carries into the soil, makes the soil very mellow and rich.

Vetch also may be sown immediately after the strawberry bed has been plowed. In most sections this is generally the latter part of June. This early sowing will make it possible to plow the vetch under the following spring and replant to strawberries.

Alfalfa and clover also are powerful legumes, and are quite extensively grown for soil maintenance and improvement on the Kellogg farms. We spread over the ground from two to four tons of finely pulverized rock lime before seeding. The seeding is done during August.

Immediate Soil Preparation

FOR growers who do not find it convenient to manure their ground during the winter, and those who wish to begin growing berries at once, we give here a plan for soil preparation that will give results fully equal to the methods just described.

Plow the ground as early in the spring as soil conditions will permit. Spread evenly over the ground from ten to twelve two-horse loads of manure per acre, and mix it thoroughly into the soil with spike, spring-tooth or Acme har-

rows. The disc also is an ideal tool for this purpose. If the ground is very loose, it should be made firm with either roller or float. If this plan is not convenient, you may plow your ground and make the soil fine and firm, and then scatter well-decayed manure between the rows of plants after the plants have been set. We have tried this plan with most gratifying results. After you get started in this manner, you may then adopt for additional areas the plan of growing legume crops and manuring the ground during the winter months.

If you are unable to secure stable manure, pulverized sheep, hog or cattle manure may be bought from the Pulverized Manure Co., Union Stockyards, Chicago, or Natural Guano Co., Aurora, Ill. These manures may be applied at the rate of one ton per acre, either before or after plants are set. We have used many carloads of the pulverized manure to great profit.

Commercial Fertilizer

SOME growers depend entirely upon commercial fertilizers. This may be used in prepared form, or the materials may be bought and mixed by the grower. All fertilizer works prepare a brand especially adapted to strawberry growing, and will give full information for applying, etc. Should you decide to mix your own fertilizer, we can recommend the following formula: 200 lbs. sulfate of potash, 200 lbs. dried blood and 400 lbs. acid phosphate.

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

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THE EVER-BEARING OR FALL-BEARING AMERICUS—MALE OR BISEXUAL

AMERICUS enjoys an almost universal popularity, and yields large quantities of fine-quality fruit. The foliage of the Americus grows close to the ground, similar to such varieties as Bubach and Aroma. It is wonderfully productive. The berries are of good size and form as will be seen by the illustration shown herewith. It has been tested in most every state and never fails to give satisfaction. Americus behaves the same in its fruiting capacity as the Superb, Progressive and Productive; that is to say, it fruits heavily in the summer, and after the plants have had about six weeks' rest another set of fruit buds develop and it begins to fruit in August and continues throughout the fall months. All fall-bearing varieties give the growers much pleasure and profit. Having berries during the fall months makes it an easy matter to get big prices which result in big profits. It is easy to build up a trade in fall strawberries. Americus is grown at both our Three Rivers and Canby farms, and succeeds everywhere from the Atlantic to the Pacific coasts.

When mixed, this makes sufficient plant food for one acre. Apply after plowing, and work well into the soil before planting.

Whether you use stable manure, commercial fertilizer or plow under legume crops, remember that best results are obtained when these materials are thoroughly mixed with the soil; and also remember that your soil must be made firm and sufficiently fine to hold large quantities of moisture. Strawberry plants, like all other plants, cannot do their best when set in soil where there are clods underneath the fine surface. See that your soil is made fine and firm to the full depth of the furrow slices.

Pruning the Plants

BEFORE setting the plants, the ends of the roots should be cut off. This is a quick and easy job. Before opening the bunches,

take an old pair of shears or knife and cut off about two inches from the tip ends of the roots. These cuts will soon callous over, which aids the formation of many feeding roots. This also aids the plants to take hold of the soil quickly, the result of which is a more rapid growth than would take place without pruning.

Setting Out the Plants

SETTING strawberry plants is very simple. The work is practically the same as setting vegetable plants such as tomatoes and cabbage. Make an opening in the soil and place the roots straight down into the opening. See that the roots are well spread. This is done by giving the plant a quick jerk or swish when placing the plant into the opening. Also see that the soil is pressed firmly against the roots

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

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A DISH OF THE LITTLE GIANT, SENATOR DUNLAP

THIS variety is truly a little giant, for although the plant is one of the smallest at digging time, the yields secured from it are a source of continued surprise and pleasure, while in quality the fruit is excelled by few others. Indeed, the name of this great bisexual has become a household word wherever strawberries are grown, and Dunlap is today one of the most popular fruits in the world. Large and handsome in form, having a rich, dark-red color, with glossy finish, shading to deep scarlet on the under side, and prominent bright yellow seeds that look like gold imbedded in highly colored wax, the Senator Dunlap is one of the most attractive berries upon the grocer's counter. Others of its strong features is its uniformity in size and shape, its flesh is bright red and is exceedingly juicy and of delicate flavor. Its foliage is tall, bright green in color, upright, with a long leaf; it develops an unusually heavy crown system, frequently as many as fifteen to eighteen crowns being found in one hill. Its flowering season is very long, its bloom is exceedingly rich in pollen—in short, the Dunlap is an ideal variety. This is the seventeenth year we have bred our strain of Dunlaps, and every year orders for Dunlap increase. Grown on all our farms.

and that the crown of the plants is just above the surface of the soil.

The Kellogg one-piece steel dibble is an ideal tool for this work. One man can set from 2,500 to 3,000 plants a day with this tool.

Some growers use a spade, which requires two men. One makes the opening with the spade, while the other places the plant into the opening. As the man with the spade moves forward he steps close to the plant and firms with the foot the soil against the roots. When the roots are placed straight down into the opening and the soil is pressed firmly against the roots, moisture soon comes into contact with the roots and growth starts quickly.

Filling in Vacancies

IF for any reason you fail to get a perfect stand of plants, these vacant places may be filled in during the fall months. The plants which live should be allowed to make more runner plants than are necessary to make the fruiting row, layering runners by placing soil back of the nodes where the young plants form. This will aid the young plants to take root quickly and to develop a large, healthy plant for resetting. Then in the fall, say during the months of September or October, take the surplus runner plants and set them wherever there is a vacancy. These vacancies may be caused by unfavorable weather conditions when setting the plants, or an occasional plant may be destroyed by the white grub.

When taking up these runner plants for re-

setting, the work should be done after a rain when there is plenty of moisture in the soil. First, make holes wherever there is a vacancy. When this is done, take up one plant at a time with plenty of earth adhering to the roots (this will be the same as transplanting a potted plant) and set it in the hole, pressing the soil firmly about the plant. By allowing the soil to adhere to the roots these young plants will be encouraged to grow, and this plan renders it possible to fill in all of the vacancies, and your field will go into the winter in ideal condition. The following spring these reset plants will give you some berries, and the second year's fruiting you will have a perfect stand.

Proper Mating of Plants

THE next essential feature in strawberry growing is the proper mating of varieties, and we urge all growers when setting their plants to see to it that different varieties are set in alternate rows, so there will be perfect interchange of pollen throughout the entire blooming season.

Varieties marked "P" in this book are pistillates. All pistillate varieties develop pistils only, and are devoid of anthers, which produce the pollen, and for this substance (the male-life germ) they are entirely dependent upon the bisexual varieties, which are marked "B."

The flowers of bisexual varieties develop both anthers and pistils, and these varieties are not dependent upon pistillate varieties, neither do they derive any benefit from them.

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

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THE UNIVERSALLY POPULAR MARSHALL

SOME varieties of strawberry plants have a universal popularity; others enjoy such prestige only in a comparatively narrow field. The old and faithful Marshall belongs distinctly in the former class. This variety has won more first prizes than any other at the famous Massachusetts Horticultural show; it has a wide popularity in the middle states; in California it is almost universally grown, and in Oregon it has the distinction of topping the Portland market in three successive seasons. Marshall is one of the blood-red varieties that never fails to attract the eye and to satisfy the taste. It is deliciously sweet, generously prolific and is in every way an ideal variety for extensive planting or home garden. Grown on all our farms.

Some growers ask why they should set any pistillate varieties at all inasmuch as they must be set with bisexuals to insure a crop. Our answer is simply this: As a rule, most pistillate varieties are more hardy, surer croppers and more productive than bisexuals. They are not weakened by pollen secretion, because they produce no pollen.

Second. They are not so susceptible to frost as bisexuals, because the pistils are not injured by the same degree of frost that will injure anthers.

Third. Insects that work upon flowers prefer bisexual flowers rather than flowers of the pistillates.

Fourth. A pistillate variety will not deteriorate so rapidly under neglect and poor management as the bisexuals.

With this information growers will understand more fully the advantages of pistillate

varieties and why their planting of pistillates should be very generous.

The Kellogg way of mating varieties is to set three rows of pistillates between two rows of bisexuals, having one bisexual earlier than the pistillate and the other bisexual variety later than the pistillate. This makes a perfect-mating method, as it gives an abundance of fertile pollen throughout the entire blooming period of the pistillate.

To make our method perfectly clear, we give the following example:

One row Longfellow (B).
Three rows Warfield (P).
One row Senator Dunlap (B).
Three rows Warfield (P).
One row Longfellow (B).
Three rows Warfield (P).
One row Senator Dunlap (B).

And so on. The Longfellow will be in full

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Bisexual Flower

Pistillate Flower

SEX IN PLANT LIFE GRAPHICALLY PRESENTED

THESE illustrations show the difference in sex life of the Bisexual and Pistillate varieties. Bisexual simply means two sexes, or in other words, it signifies that both sexes are present in the Bisexual plants. Note that the Bisexual blossom (on the left) not only has well-developed pistils, but also has anthers surrounding the pistils, or center of the blossoms. These anthers hold pollen, a flour-like substance, that contains the reproductive germs. When the anther bursts, pollen is carried over the field or patch by the wind, and the pistils of both Bisexual and Pistillate are fertilized, or pollenized, which causes the plants to bring forth fruit. The Pistillate blossom (on the right) has pistils only, and Pistillate varieties will yield a comparatively small amount of fruit unless fertilized by a Bisexual variety. Throughout our book we refer to the Bisexual as (B) and the Pistillate as (P). Always mate a Pistillate with a Bisexual if you would win success.

bloom with its anthers bursting when the first flowers of Warfield are opening. The Senator Dunlap will be in full bloom while Warfield's later flowers are receptive. Soon after the pistillate flower opens, its pistils or stigmas become receptive, and should there be no pollen for the pistillate flowers at that time there could be no fruit, and in case only the pistils on one side of the pistil cone would receive pollen it would make a one-sided berry. Lack of proper pollenation is the cause of knotty fruit. It also causes hard, green, undeveloped ends to form on the berries.

Mating Kellogg Varieties

HEREWITH we present in simple form a method of mating all plants grown by this company. The pistillates are arranged, as will be seen, in center columns, and the bisexu- als that will pollenize the pistillates occupy the outside columns. If you, for instance, select Haverland, you may be perfectly sure that any bisexual of the mid-season will pollenize that great pistillate; and the same is true of the lower table. In the case of the ever-bearers, Productive is a pistillate. Any of the other ever-bearers will perfectly pollenize Productive.

Bisexu- als

Excelsior
August Luther
Early Ozark
St. Louis
Michel's Early
Climax
Texas
Longfellow
Heritage
Lovett
Bederwood
Tenn. Prolific
Wolverton
Staples
Jesse
Warren

Pistillates

(of the earlier varieties)

Virginia
Crescent
Warfield
Haverland
Highland
Downing's
Bride

Bisexu- als

Premier
Senator Dunlap
Wm. Belt
Splendid
Clyde
Klondike
Nick Ohmer
New York
Lady Thompson
Parsons' Beauty
Joconda
Sharpless
Ohio Boy
King Edward
Missionary

Pistillates

(of the later varieties)

Buster
Enormous
Bubach
Samole
Fendall
Cardinal
Kellogg's Prize

Bisexu- als

Helen Davis
Senator Dunlap
Wm. Belt
Parsons' Beauty
Clyde
King Edward
Pearl
New York
Goodell

Bisexu- als

Aroma
Pride of Mich.
Brandywine
Marshall
Chesapeake
S. Late Champ
Dornan
Commonwealth
Joe Johnson

The Mating of Bisexuals

IT would seem unnecessary to pay any attention to the mating of bisexual varieties, inasmuch as they produce flowers which develop both anthers and pistils, but we know from

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SOME NOBLE SPECIMENS OF A NOBLE VARIETY

AROMA is a late variety that is in universal demand. And he who once has grown this fruit always will grow it. The berries are very large and are bright red to the center. The flesh is solid and smooth, and the flavor is richly aromatic. The berry is firm and it is one of the leading varieties as a long-distance shipper. Its appearance in the box is most attractive, the yellow seeds imbedded in the bright-red flesh making it most alluring. These excellent qualities have combined to make the Aroma one of the most popular berries with the commercial grower, and in many localities it is the leading late berry. Strong in pollen, Aroma is an excellent mate for late pistillates, the bloom starting to open medium early and continuing until quite late. The foliage is a deep green, of spreading habit, which gives the sun a clear course to the crowns; its leaves are long, broad and clean. This is the twenty-third year we have selected this great variety, and this year have the largest crop we ever have grown. Grown only at Three Rivers.

long experience that it does pay to set several bisexual varieties in the same block.

It seems that the stigmas of some varieties will not receive the pollen from the anthers of that same variety with the same results as from other varieties. We have noted great improvement in both quantity and quality of berries by setting several bisexual varieties together, and we are sure that the interchange of pollen from one bisexual variety to another is very beneficial, and we are confident that many partial failures in getting a large yield of perfectly formed fruit are caused by improper fertilization.

No Kellogg customer need be in fear of making a mistake by ordering varieties that will not mate perfectly, as we go over each order carefully, and if the varieties ordered will not go well together we notify the customer, calling his attention to this fact, and we make such suggestions as we deem necessary to insure success.

We especially ask our friends, however, who do order pistillate varieties only, to advise us that they are doing so knowingly, so that we may be sure that they already have the necessary bisexuals with which to mate pistillates.

The Cultivation of Plants

PROPER cultivation has a wonderful effect upon plant development, and any grower who neglects this most important part of the

work cannot expect to grow big crops of fancy berries.

Cultivation should begin immediately after the plants are set and repeated every week or ten days throughout the entire growing season. For this work no tool is better than the Planet Jr. twelve-tooth cultivator, which we can supply you at factory prices. These cultivators cut every particle of the soil and leave it perfectly level.

When cultivating go close up to the rows, and should any soil be thrown upon the plants, brush it off with hand or foot. The crowns of plants never should be covered with soil, as this bleaches the plants and makes them turn yellow, and if it rains soon after the plants are so covered it might smother them.

Should you have soil that bakes and gets hard, a five-tooth Planet Jr. should be run in the center of the space between the rows. With this tool, it will be safe to cultivate to a depth of four or five inches, as the shovels do not go close enough to the plants to cut the roots. This deep cultivation not only loosens the soil, but permits large quantities of water to penetrate during rains.

After each rain, just as soon as your soil will permit, cultivate with a twelve-tooth cultivator. This will level down the surface and make a dust mulch, which will prevent the escape of moisture.

Cultivation has many advantages: First, it aerates the soil, which is essential to bacterial

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THREE ACRES THAT PRODUCED \$1,764 WORTH OF STRAWBERRIES

ONE of our enthusiastic customers is Henry Dittmore of South St. Joseph, Mo., and the above illustration shows his splendid strawberry patch as well as the beautiful Missouri river scenery surrounding it. Mr. Dittmore feels that he has reason to be enthusiastic about Kellogg plants, as he produced from three acres of Kellogg plants 1103 crates of strawberries which brought an average of \$1.62 per crate, or a total of \$1,764—almost \$600 to the acre. Actual experiences of this sort are convincing proof of strawberry success.

life; second, it forms a dust mulch, which retains moisture during dry times. Moisture which works up from the lower soil to the surface soil by capillary attraction is held in reserve for plants when they need it most. Third, it destroys weed seed while germinating, and controls all obnoxious growth. Fourth, it changes the position of the soil and aids decomposition and nitrification of vegetable matter. Fifth, it discourages insects such as grubs, aphides, beetles, etc. Sixth, it insures the grower against loss by drouth and annoyance of weeds, and saves a world of hand work.

Just What Cultivation Does

TO sum up the advantages of repeated cultivation: It establishes a dust mulch; a dust mulch prevents escape of moisture; moisture dissolves plant food and aids bacteria in converting plant food into available form for the plants; plant food combined with moisture makes active roots, and active roots supply an abundance of nourishment to the stems, leaves and body of plants. These, combined with the essential elements furnished by the atmosphere, keep up a perfect circulation and build up a mammoth vegetative growth. A mammoth and healthy vegetative growth makes a perfect-working plant machine for the manufacture of a big crop of big red berries.

Before closing this important subject, let us caution you against cultivating while the soil is sufficiently wet to paste when pressed between the hands but do not defer cultivation until a crust forms. Moisture escapes very rapidly through the cracks and crevices which form in crusted soil.

Do not go deeply close up to the plants. The teeth which cut the soil next to the plants should be shorter than the balance of the teeth on the cultivator. A blacksmith will soon shorten the teeth to the desired length. About

two or three inches is as deep as the teeth should go which work up close to the plants.

Continue cultivation until late in the fall. After you are through cultivating, attach a shovel to the rear end of the Planet Jr. cultivator (this shovel should be about three or four inches in width) and make a furrow in the center of the space between the rows, which will act as a drain.

The water from rains and snows during the winter months will drain into this furrow and prevent the freezing of ice about the crowns of plants. Or this furrow may be made with a small furrowing plow. Any tool that will make a furrow four or five inches deep and about six inches wide at the top will serve the purpose.

The soil directly in the rows and around the plants should be hoed often to keep the soil loose and to prevent weed growth. These hoeings bring the moisture close up to the plants and prevent evaporation, as would be the case if the strip of soil was left undisturbed. When hoeing do not cut the soil deeply, especially when working around the plants; simply loosen the surface, going deeper as you work away from the plant.

Cultivating the Fruiting Bed

WE are perfectly satisfied that it pays to cultivate the fruiting bed. Strawberries are about ninety-seven per cent water, and as this water forms in the berries while they are maturing and ripening, it is absolutely essential that the plants be supplied with plenty of moisture during the fruiting season. And unless irrigation is practiced, the only way to supply this moisture is through the combination of mulching and cultivation.

If your plants have been mulched—and they certainly should be—this mulching may be raked up close to each side of the rows. This

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A BOX OF HAVERLAND, ONE OF THE UNIVERSAL FAVORITES

HAVERLAND is one of the greatest of the pistillates of the mid-season, and has won wide-spread popularity among strawberry growers. After twenty-five years of selection and restriction of this variety, we can with absolute confidence recommend growers everywhere to give to this variety a large portion of the space at their command. The Haverland yields a long, large berry, bright crimson on the sun side, shading to a light red on the under side; rather full and round at the stem end, gradually tapering to an obtuse point. The seeds are bright yellow and just prominent enough to increase the handsome appearance of the berry, over which the calyx gracefully falls. No other berry of our acquaintance presents a more beautiful and tempting appearance in the box than does the Haverland. The foliage is tall, of spreading habit, with a long, dark leaf. The Haverland makes strong productive plants which produce large crops under all conditions of soil and climate; indeed, so productive is it that the berries lie in windrows, and render picking a delight. We advise a generous setting of this great Pistillate. Grown at Three Rivers and Twin Falls.

work should be done in the spring at the same time when you are removing the mulching which lies directly on top of the rows. Raking up the mulching against the rows will leave a bare space of ground between the rows, which should be cultivated every week or ten days until berries are ready to pick. At this time cultivation should be more often, as the pickers will pack the soil while gathering the fruit. It will be all the better if these spaces are cultivated every two or three days during the entire picking season.

The heavy coating of mulching along the rows will prevent the escape of moisture there. It also will prevent the intrusion of weeds and grass, and the dust mulch made by repeated cultivation will hold the moisture between the rows.

The spring cultivation in the fruiting beds will perform the same functions as it does when cultivating new-set plants; that is, it will make conditions favorable to bacteria, aid in retaining moisture, eliminate weeds, and it will in every way assist the plants in perfecting a full and profitable crop of berries. The fruit will be much larger and of better color than could be possible without cultivation.

A progressive fruit grower would not think of trying to grow tree or bush fruits without cultivating from early spring until after the fruit was all gathered, and if fruit trees with their long tap roots and lateral roots extending deeply into the soil must be cultivated in order

to get best results, how much more important it must be that strawberries, with nothing but fibrous roots, should be cultivated.

Strawberry growers who mulch during the early winter and cultivate between the fruiting rows during spring and summer never need have any anxiety about dry weather shortening the crop.

The results of our experimental work along this line have been so satisfactory and the outcome so valuable that it now seems absurd to us for anyone to try to grow a record crop of fancy berries with no other source of moisture retainer than mulching.

We give here a few rules which should be observed when cultivating the fruiting bed. Start cultivation as early in the spring as soil will permit. At this time of the year the lower soil is filled with moisture, and the earlier cultivation is begun the less moisture will escape. This early cultivation will prevent a waste of the very thing which goes to make the berries.

The first cultivation may be with the five-tooth cultivator, going four or five inches deep. Follow this with the twelve-tooth cultivator so the soil will be smoothed down level.

Do not cultivate while the plants are in bloom if the top soil is dry, as this creates too much dust which, in our judgment, interferes with pollination. But you may cultivate after rains while the plants are blooming, but never stir

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SOME SPECIMENS OF WM. BELT BERRIES

THIS famous variety is grown in great quantities over a large range of territory. The Belt produces a large berry of extraordinary beauty. In color it is bright red, which extends to the heart of the fruit. The Belt is very rich, juicy and meaty, and in every way a desirable berry for table purposes. The yellow seeds of this variety make a fine contrast set in the beautiful, bright-red surface, creating a sparkling effect and making it particularly attractive when placed, neatly packed, on the market. The calyx is rather small for so large a berry. The foliage is unusually tall, and light green in color. The Belt is an ideal pollinizer, and has a long blooming season. The berry varies somewhat as to form, but the illustration shown represents a typical Wm. Belt. We have had this variety in our breeding bed for nineteen years, and its strong points have been developed to perfection by the method we employ in selecting from the healthiest and most vigorous mother plants. Wm. Belt and Glen Mary make an ideal team. Grown on all our farms.

the soil at any time after a rain until it is so dry that it will crumble.

Preventing Pollen Secretion

SOON after plants are set they will send out fruit stems on which develop fruit buds. These should be removed before the buds fully open, to prevent blooming. If the plants are allowed to come into full blossom they will be weakened by pollen secretion, and if the young-set plants are allowed to bear fruit the same spring they are set, it will be very injurious and possibly result in a failure. Young-set plants will produce fruit the same season they are set, but they are in no physical condition to withstand the shock of pollen secretion and seed production. Therefore, we urge the removal of all fruiting stems during the first season. One man or boy will do this work on one acre of plants in about one or two hours. Simply pinch off the fruiting stems with thumbnail or cut them with shears or knife. These fruit stems grow above the foliage, which makes it easy for even an amateur to distinguish them from the rest of the plant.

Another great stimulus to the newly set plants is the removal of their first runners, and so we suggest that all runners be cut off until the last of June. This will give the plants an opportunity to build up a strong and vigorous growth, at which time they will be in a splendid physical condition to make strong and fruitful runner plants without injury to the mother plants.

Training Runners

WHEN berries are grown in hills, such as the single-hill rows or twin-hill rows, all runners should be cut when hoeing, while with the single hedge or triple hedge the runners should be trained or set in a manner to make up the desired row. All of this work will be done when hoeing. Simply place the runner cord where you want it, and with the hoe place soil over the runner cord just back of the node or bud which forms the young plant. The soil you place over the runner cord will hold it in place, and also will aid the young plant quickly to take root. After you have the desired row, the balance of the runners should be cut as fast as they appear. This runner cutting will relieve the plants of the strain of perpetuating

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HELEN DAVIS, ONE OF THE GREATEST OF EARLY VARIETIES

INTRODUCED by the R. M. Kellogg Company in 1911, this great variety has grown into general popularity. What we could not know when it was first offered as to its universal nature we have since learned to our great satisfaction, for not only has Helen Davis become a leading favorite in almost every section of the eastern and middle states, but has shown its stamina and fruiting power in the coldest regions of the Northwest, and is a prime favorite in the irrigation districts of the inter-mountain states, being everywhere recognized as a drought resister. Stories of its prolific yields come to us in many congratulatory letters from customers representing every section of the United States. Of great size, beautiful in color, unsurpassed as a yielder of high-quality fruit, Helen Davis holds a place in the strawberry world few varieties enjoy. Our friends may set heavily of this variety with full confidence. Grown at our Three Rivers and Twin Falls farms.

themselves, and will encourage strong and fruitful plants.

Controlling Insects and Diseases

ONE of the best ways to control insects is by rotation of crops and clean cultivation. Carelessness and neglect on the part of the grower is the cause of most of their troubles that come from insects. Weeds and grass, when allowed to grow among the plants, make an ideal place for insects to hibernate, and in such places they breed very fast. Such insects as crown miners, crown borers, root borers, weevil, beetles, grubs and aphides always are found in foul fields, and these insects are seldom found where intensive cultural methods are employed and where crop rotation is followed.

Plants taken from the fruiting bed for setting increase the troubles of the strawberry grower, reduce his crop and lessen the fruiting capacity of the plants, and carry insects from the old field to the new field only to propagate new broods of these enemies to successful horticulture.

Then, some growers allow their fields of plants to fruit from three to five years, permitting the plants to run at will, and seldom pay any attention to removing the weeds and grass. Such places afford insects a splendid opportunity to get full control.

No other fruit crop with which we are acquainted can be grown with less trouble against

insects than strawberries when properly handled. The Kellogg way for controlling insects is to discard the fruiting bed after it has fruited two years. The ground is then planted to some other crop, and we never take plants from a fruiting bed to be set into another field. The Kellogg plants always are propagated in a special bed prepared for that purpose.

During our thirty-one years of experience in this line of work, we have learned that it is practically impossible to grow plants and fruit from the same plants. When a grower takes plants from his fruiting bed, the roots of the plants which are left for fruiting are injured to the extent of greatly reducing the crop of fruit, and the plants which are taken for setting are never as strong as plants which are grown in soil especially prepared for plant development and are cultivated especially for plant growth.

In our travels through different strawberry sections and in observing the different methods employed by different growers, we find that growers who follow the Kellogg way seldom are annoyed by insects or plant diseases, and they are satisfied with the returns they get from their strawberry crops. While growers who do not rotate and who do not practice intensive cultural methods generally are dissatisfied with results, because weeds, grass and insects greatly have reduced their crops of fruit.

Growers who set the Kellogg Pedigree plants and follow the Kellogg way not only grow larger crops of fruit, but these crops are

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A TABLE BASKET OF LONGFELLOWS

LONGFELLOW is just as good as it looks, whether you consider it from the size, form and color of the berry or the vast quantities of fruit it yields. The season of this great variety is very early to late, and the amount of fruit it produces each season few varieties ever excel. In form the fruit is long and of a perfect strawberry type. In color it is dark red, and this color extends from circumference to center. In flavor it is as rich as any variety we ever have tasted, and is very mild and sweet. It is a profuse bloomer and every bloom is perfect, making it an ideal pollinizer of pistillates of the early and mid-season. We have been selecting and fruiting this variety since 1905, and since first offering it to the public its popularity steadily has increased, and those most familiar with it are its friends. Grown at Three Rivers and Twin Falls.

grown with less work and less worry than could be done with cheap plants or with plants taken from their own fruiting beds.

Spraying Strawberry Plants

FOR the benefit of those who find it necessary to spray, we give here formulas for the control of both insects and plant diseases.

All leaf-chewing insects which eat holes in the leaves of plants may be destroyed by spraying with arsenate of lead. Put three pounds of arsenate of lead in a two or three-gallon bucket and moisten it with hot water, and pulverize with mallet or old potato masher. Continue adding hot water and pulverizing until you have a creamy solution, and until all of the lead is dissolved and taken up by the water. Add water and stir until the bucket is full. When cool, pour this into 50 gallons of cold water. Spray it over the plants, and when spraying keep the solution well stirred so the poison will be well incorporated with the water, and spray thoroughly. See that every leaf is covered.

The Saw-Fly.—The first insect that appears upon the scene in the spring is a little gray-green worm, which for some reason we cannot explain is called the saw-fly. This insect rolls up like a snail on the under side of the leaves, through which it eats, leaving many small holes. It does not remain long and seldom does serious injury. As in the case of other leaf-

eating insects, arsenate of lead is the remedy for the saw-fly. The beetle, of which there are several families, are hard-shelled bugs, very small in size. The larvae look like grubs. The beetles work upon the foliage while their larvae feed upon the roots of the plants. Spraying with arsenate of lead will destroy the beetles, which will in turn dispose of their larvae. But where these have been present on the vines during the fruiting season the vines should be burned over after the fruit is picked.

The Leaf Roller.—This is a universal pest of the strawberry. For this insect arsenic should be added to the mixture of arsenate of lead as above described. In preparing the arsenic, take one pound of the poison, two pounds of sal soda and one gallon of water; boil until all are completely dissolved. When cool use $1\frac{1}{2}$ pints of this solution, $2\frac{1}{2}$ pounds of arsenate of lead (the latter being prepared as described in the paragraph above), and two pounds of lump-lime, slaking the lime before using, of course. This combination is a very rank poison and must be handled with great care. As a rule, there are two broods of the leaf-roller each season in sections north of the Ohio river. The first hatches from June 1 to 10, the second brood in the latter part of July or early August. At the first sign of the rolling of the leaf get out your spraying material and see that every plant is thoroughly covered with the spray mixture. Immediately after hatching it weaves

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SOME TYPICAL WM. BELTS GROWN IN OHIO

NOTWITHSTANDING the fact that his strawberry plants were frozen stiff in the heavy frost of May 13, 1914, Mr. D. A. Dickinson of Lima, Ohio, secured some wonderful fruit which drew out considerable newspaper comment in his neighborhood. Writing us June 20th, Mr. Dickinson says: "The wonder to me is how any blossoms escaped, but in spite of all their hardships, we had 100 quarts of berries from our little patch, and four-fifths of them were extra fancy. June 4th we picked four quarts of Wm. Belt berries, eleven of which placed in a line measured $23\frac{1}{2}$ inches; seven of them measured 16 inches, and five measured a trifle more than 12 inches. Three of them weighed a quarter of a pound. I had quarts of these fancy berries. No photograph can do them justice, because no photograph can show the color, which was particularly fine, as well as was the flavor. The plants I bought from you this spring are simply fine. I set out 3300, and only seven failed to grow. I have them set 15x15 inches, and hundreds of them measure from 16 to 18 inches across the top; many of them have three large crowns, and some of them four crowns.

a web in the leaf which folds the leaf together. No poison will affect the roller after the leaf is folded.

The White Grub.—This is a universal and most persistent enemy of the strawberry and, as it resides deeply in the ground, it is very difficult to reach. In fact, the only safe way is to free the soil from the grub before the plants are set. Late in the fall preceding the setting out of the plants plow the ground and bring the grub to the surface. If the weather is very cold when this is done, many of the grubs will be frozen. To add to the assurance of their extermination it will be well to turn in hogs, or poultry, or both, while the plowing is going forward. As the white grub is a delicious morsel to both poultry and hogs, they will be greedily devoured by the animals. After the plants are growing in the spring, if the white grub be found in the plot, the only thing to do is to dig down to the roots of any plant apparently affected by the grub, catch the grub and kill him.

The Root Louse.—This very small but insidious foe, doing its work on the roots of the plants, is known in the books as the aphid, because it is the friend (aphides) of the ant, and supplies the latter with the sweetness that inheres in the roots of the strawberry plant. The lice have no means of locomotion, but are carried on the backs of the ants from plant to

plant. If the surface of the ground about the plants constantly is stirred, the ants soon will be driven out, and this will result in the destruction of the louse. A simple preventive that keeps the root lice from attacking the plants is tobacco tea, which is made by boiling one pound of tobacco stems in five gallons of water for twenty minutes. Let this cool and then, just before the plants are set, dip the roots up to the crown. Tobacco is so offensive to the lice that they will never touch a root thus treated.

Preventing Plant Diseases.—Spraying the plants with lime-sulphur solution is now recognized as one of the most effective preventives against all forms of fungous diseases. We advise our patrons to purchase the prepared lime-sulphur solution, unless they are very extensive growers and require very large quantities of spraying materials. Two gallons of the prepared solution will thoroughly impregnate fifty gallons of water, and the standard preparations made by the reliable chemists are likely to be better than those made by a novice. Leaf spot, or rust, is a fungous growth which spreads by spores. The spot looks like iron rust with a white dot in the center. This rust if permitted to spread, will do great injury, as the disease eats into the tissue of the leaf, greatly interfering with its growth. Another injurious disease is mildew or leaf-curl. Examine the leaf

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"THE GREATEST STRAWBERRY I EVER SAW"

THIS is what Professor Van Deman, one of the greatest horticulturists in the world says of Goodell, the famous Pacific-coast origination. We have tested this variety at Canby, Oregon, at Twin Falls, Idaho, and at Three Rivers, Mich., and it gave us a pleasant surprise, both in the quality and quantity of fruit it produced, in all three divisions of this country. On the Pacific coast it is simply wonderful. It is a heavy producer of large, dark-colored and richly flavored berries. Pacific coast growers should set this variety heavily.

through a magnifying glass and you will note that a delicate web has been woven over the tissue of the affected leaf. This has a tendency to curl the leaf as though it were badly affected by drouth.

A Word of Warning.—Never spray your plants after fruit has formed. The corrugated surface of the strawberry makes it dangerous to do so, as particles of the poisonous materials may adhere to the fruit, thus rendering it dangerous to health and even life to apply the spray after that time. Do not take the risk such action involves.

Systems for Growing Plants

THERE are several different systems for growing berries, but the most popular and most profitable systems are hills, twin hills, single-hedge and triple-hedge. Some growers practice the matted-row system, but we do not favor this method because fancy berries cannot be grown where plants mat thickly together. Fancy berries always will bring a fancy price, and for this reason we recommend the systems that will allow the plants to produce that kind of fruit.

Hills.—When berries are to be grown in the hill system, the rows should be 30 inches apart and the plants set 15 inches apart in the rows. Keep off all runners, unless there should be some plants which fail to grow. In this event, allow a sufficient number of runner plants to grow and take root to fill in the vacant places. The runner may be either pinched off with the thumb nail or cut off with a knife, shears or with the hoe when hoeing.

To set an acre for the hill system requires 14,000 plants. The plants should be set in check rows so they may be cultivated both ways. The 30-inch space may be cultivated with horse tools, while the 15-inch space may be cultivated with the Planet Jr. hand cultivator, which makes hoeing unnecessary except for one or two hoeings during the first month after the plants are set. With this system the yield should be about one quart per plant.

After the first crop of berries has been picked mow off the foliage close to the crown with a two-horse mowing machine, scythe or sickle, and remove the coarsest of the mulching material, leaving the finest of it to be worked into the soil, which will add high quality humus to the soil. Cultivate between the rows with five-tooth cultivator or with two-horse corn-cultivator. Follow the cultivators with hoe or garden rake and thoroughly loosen the soil in the row between the plants. When doing this work draw finely pulverized soil over each hill, barely covering the crowns. The new growth will come up through this fine soil and a new system of roots will form just above the old root system. Follow the same cultural methods as were practiced the first year the plants were set.

Twin Hills.—The twin-hill system is very popular in many sections where fancy berries are extensively grown.

When marking out for the rows, make two marks 16 inches apart, then leave a space of 30 inches and make two more marks 16 inches apart, and so on. With this system, you will have twin rows 16 inches apart with a 30-inch

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

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OUR FAMOUS PRIDE OF MICHIGAN

FROM its introduction by us in 1905 this variety has been recognized as one of the greatest late varieties ever originated, and from reports we have received from thousands of customers who have grown it more or less extensively, and which represent nearly every section of this continent, there is no longer a doubt of its wide habitat and success. In size the berries are surpassed by no other variety, and it produces immense quantities of fancy berries. The berries lie in windrows, and the heavy, dense foliage spreads out wide enough to shade them. The meat is very firm and exceedingly rich, solid in texture and very smooth, and in flavor delicious. As a shipper it is unexcelled. The foliage is very large, as is the bloom also, and the latter is exceedingly rich in pollen. It has a long blooming season, and is, therefore, one of the most valuable varieties for mating purposes. This variety makes very few runners—just about enough for a fine fruiting row, thus rendering it unnecessary for the berry grower to spend much time in keeping down the runners. This feature of the Pride is highly appreciated by growers. Grown at Three Rivers and Twin Falls.

space between every set of twin rows. The 30-inch space is cultivated with horse tools, while the 16-inch space between the rows is cultivated with hand cultivators.

The twin-hill system requires 18,200 plants per acre. The plants should be set 15 inches apart in the rows, the same as in the single-hill system, and if set in check rows, so they may be cultivated in both directions, it will save much handwork. More berries may be grown under this system than in any other way.

In preparing for the second year's crop follow the same plan as in the case of hill culture.

Single Hedge.—The single-hedge system is one of the most popular ways for growing berries with which we are acquainted. Make the rows 3 feet apart and set the plants 2 feet apart in the rows, and, of course, the plants should be set in check rows to permit cultivation both ways. Each of the plants you set should be allowed to make two runners, and these runners should be layered directly in line with the original rows. When hoeing, place soil over the runner cords, thus layering them so that the young plants will take root quickly. After the row has been formed in this manner, the rest of the runners should be cut off as fast as they grow out to sufficient length so that they may be cut off with the hoe.

For the single-hedge system it requires 7,250 plants to set an acre. Yield ranges from six to ten thousand quarts per acre.

In preparing for the second year's crop the same plan may be followed as described under the hill system, and when this work is properly

done the second crop will be fully as large and often larger than the first crop.

Triple Hedge.—The triple hedge is similar to that of the single hedge, with the exception that there are more runner plants allowed to take root. Make the rows $3\frac{1}{2}$ feet apart and set the plants 2 feet apart in the rows. Allow each of these plants to make six runner plants, and layer four of the runners in X fashion, with the mother or original plant forming the center of the X, and layer two of the runner plants directly in line with the original rows. This is what we formerly called the double-hedge row, but we think the triple hedge is a better name, because after the row is fully formed there will be really three distinct rows of plants.

This system requires 6,225 plants per acre. Many growers report yields of ten to twelve thousand quarts per acre.

In preparing for the second year's crop, where plants are grown in the triple-hedge rows, it is a good plan to take a common breaking plow and plow a furrow from each side of the row of plants and plow under plants which have formed on the outside of the rows. This will make a ridge between every two rows which should be leveled down with five-tooth cultivators or two-horse corn-cultivators, and when hoeing the plants should be covered very lightly with fine soil the same as described under hill culture. The plants which were left for fruiting will grow to mammoth size and each plant should be allowed to make about one runner plant which may form on each side of the row to take the place of the plants which were plowed under when narrowing down the

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

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A GREAT TRIO OF EVER-BEARERS—ADVANCE, FORWARD AND ONWARD

SAMUEL COOPER was the originator of the Ever-bearing strawberry, but his three latest originations named above mark a new era in the history of strawberry growing. We are combining specimens of the three varieties in the dish shown above, for although the foliage of the three varieties is distinctly different, the fruit which we have gathered from plants of these three varieties is so much alike as to make it difficult to distinguish between them. Not only are the berries alike, but they are almost uniform in the method of growth and amplitude of yield. On our farm at Three Rivers in 1914, these three varieties produced immense crops of unusually beautiful and tasty fruit. Every representation made by the originator is fully borne out in our own experience. Here is what Mr. Cooper has to say about them: "All three are seedlings of 'Autumn,' crossed with 'Cooper,' and are so much alike, one description answers for all. They are all perfect blossoms, good healthy growers and free plant makers. The fruit is large, firm, dark red and round as a top, never misshapen and quality good. Fruits from June to November. These varieties fruit more on new runners than the 'Superb,' but like the 'Superb' are not much affected by spring frosts as they all bore a very heavy crop last June while my summer varieties did not produce over one-third of a crop on account of frosts. They all are well adapted for hill culture which is by far the best way to grow them. I picked off only the fruit stems in the spring, and commenced shipping berries August 1st." All three are bisexual. These three varieties are grown only at Three Rivers. Set generously of these varieties.

rows. The second crop should be fully as large or larger than the first crop.

Matted Row—While we do not favor the matted-row system, we give instructions for growing berries in this manner for the benefit of those who do not care to grow fancy berries. Make the rows four feet apart and set the plants thirty inches apart in the rows, and allow the runners to form at will. This, you will observe, will give you a wide matted row of plants, and as the plants will mat quite thickly, it is only natural that the berries will be small and that they will not bring the top-notch prices.

This system requires 4,400 plants per acre and will yield from four to six thousand quarts of medium-sized berries to the acre.

In preparing the matted row for the second year's crop it always is necessary to use a breaking plow or small barshare plow and throw a furrow from each side of the row, leaving a strip in the center of the row about six inches wide. In this strip will be left plenty of plants to form a row for the second year's fruiting. After the row has been narrowed down with the plow go over the rows with the hoe and cut out some of the surplus plants, leaving only the strongest plants for the second year's crop. These plants will represent the mother plants, from which will grow a sufficient number of runner plants to form a good row for the second year's crop. After the plants have been arranged in this manner with the hoe, the ridge between the rows should be

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

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GLEN MARY, THE UNIVERSALLY POPULAR

PERHAPS no better recommendation of this extraordinary mid-season bisexual could be given than that contained in a letter received in June, 1914, from W. D. Gay, mayor of the city of Essex, Iowa. Mayor Gay wrote us as follows: "We set the Glen Mary plants very late in 1913, and the dry summer of that year did its best to burn up these plants. But their long, massive roots struck deeply, and 'Mary' kept green all through the burning desert winds, and she thrived, made numerous young plants and large crowns last fall. Three times Glen Mary was frozen stiff while in bloom—notwithstanding all of these vicissitudes, Glen Mary looms up an easy winner—more berries, larger berries, finer berries as to color and shape, better sellers, better eaters, better canners and better shippers. My entire field hereafter will be composed of Glen Mary. I never supposed it was possible to grow such enormous fruit with such conditions as these plants have been subjected to. You ought to push Glen Mary harder." Mayor Gay's advice is excellent.

leveled down with cultivator and a small amount of fine soil drawn over the plants which were left for fruiting. It has been our experience that the matted-row system always will give a better crop the second year than it did the first year, but in no case allow plants to fruit more than two years. When plants are allowed to remain in fruiting longer than two years they deteriorate and become less fruitful, but the most serious objection to allowing plants to fruit more than two years is that it makes conditions favorable to all insects which work upon strawberry plants.

Mulching Strawberry Plants

MULCHING the plants is one of the most important features to be considered, and we cannot lay too much emphasis on this point. In northerly latitudes where freezing and thawing begin early to alternate, as well

as in those colder sections where freezing weather comes to stay for a while, mulch should be applied after the first hard freeze in the fall. Here we must protect the vines from the cold weather, so we cover them over, using about two and a half tons of good straw to the acre to go over the vines themselves (say one inch deep over the vines), and fill in heavily the spaces between the rows. In the South, where mulching is done for two purposes only—to retain moisture in the soil and keep the fruit clean—mulching need not be done until shortly before the buds open. There the mulch should be placed along the rows close up to the plants, but do not cover them.

During the winter in the North heavy rains and snows have soaked the mulching to such a degree that it rests upon the vines as a mat so heavy and so dense as to render it impossible for the plants to grow up through it without some help, and therefore, early in

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PROGRESSIVE AS IT FRUITS IN AUTUMN

SOME of our friends find it difficult to realize that there really has been developed an order of strawberry plants that actually yield two full crops of fruit in a single season. But the fact has now been so fully demonstrated that few skeptics remain. We show at the top of these two pages just how the fruit of the two crops—Spring and Autumn—differentiate on the same vines. The variety is *Progressive*, and it is rightly named, for its introduction was one of the really important events in the strawberry world. *Progressive* is a cross of the Senator Dunlap with Pan-American, the earliest of the ever-bearers. The Dunlap strain is very clearly marked, especially by the immense crops of fruit the *Progressive* plants yield. It is doubtful if any other of the ever-bearers ever will attain to the yields that this great bisexual ever-bearer turns off. Every grower should give this variety a thorough testing-out. *Progressive* is produced on all of our farms.

the spring, when vegetation is starting up, the mulching should be separated directly over each row. This will be done easily with the fork. Just make an opening through the mulching that lies upon the plants, and the plants will have no difficulty in coming through. This will leave the mulching close up to the plant, thus making a clean floor for the berries to ripen upon. The moisture in the mulching will aid the plants, and the presence of the straw will discourage weed growth about them. It is important that the mulching be handled just right, both when it is applied and when it is removed.

As to kind of materials for mulching, any straw will serve excellently; so will marsh hay, sown corn, sorghum pomace, or swamp grass. Our Atlantic coast friends find the sea-weed a satisfactory mulching material.

Heeling-in the Plants

THERE is a direct relationship between the quality of plants one buys and the quality of fruit the grower will have to offer his trade.

We assume at the outset that you have purchased the best plants possible to secure. Naturally, then, you intend to take the best possible care of them. If you are not prepared to set the plants upon their arrival, you should immediately open up the crates, take out the plants and heel them in. That is, dig a V-shaped trench in shaded ground, making it sufficiently deep to take in the roots without curling them up. Loosen the raffia cord that binds the bunches and set the plants in the trench. Draw the soft, moist earth up around the crowns and wet the plants liberally. If they are warm when opened, the unnatural heat will slowly be drawn out and the plants will be all the better for having been heeled in. Do not fail to act promptly. Neglect for an hour may be fatal under some conditions. Consideration always should be given to the season and weather conditions as to the length of time they are permitted to remain in the trench. In the early spring, when the air is cool and moisture abundant, it may be safe to leave them in the trench for days, and

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PROGRESSIVE AS IT FRUITS IN EARLY SUMMER

sometimes for weeks. But later on, when suns are hot and atmosphere is dry, they should be left in the trench only long enough to cool thoroughly.

Stimulating Fruit Production

IT FREQUENTLY occurs that a grower will find his soil is lacking in necessary fertility to develop a generous crop of berries, while his plants remain strong and vigorous, and ready, under proper conditions, to yield a profitable crop. The most effective way of supplying the requisite fertility, and the one that insures the largest returns for the investment of time and money, is to apply nitrates of soda at the rate of from 75 to 100 pounds to the acre according to the apparent needs of the soil and plants. This work should be done by hand, and great care must be taken that none of the nitrates come into actual contact with the plants themselves. Nitrates are very heating and will injure and perhaps destroy any plants which they touch directly. Put on an old pair of gloves for the work and it will be very quickly

accomplished. The results will be most gratifying. Prof. W. F. Massey says that in the case of a 1¼-acre plot, from which he had expected very little in the way of strawberries, he brought up the yield to 7,000 quarts of berries by using nitrates of soda in this manner.

Strawberries on the Market

THAT the "package sells the fruit" has become axiomatic all up-to-date growers are coming to realize. Good packing begins with the picker in the field, and if he will do his part it will be easy for everybody else to perform his duty in that regard. Separate the firsts from the seconds when picking, and then let the men in the packing house neatly top off the boxes and the job will be done with neatness and dispatch. If berries are round in form, they should be placed with stem-ends down. If berries are long, they will present a much better appearance when set on their sides, glossy side up. Not only does this method show the berry to the best advantage, but also a sufficient amount of the green calyx

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A LITTLE PATCH WITH A FINE RECORD

This is a scene in the 25x25-foot patch of Kellogg plants on the town lot of Charles Swanson at Bertrand, Neb. Mr. Swanson reports that he grew 125 quarts from the plot, or at the rate of 10,000 quarts to the acre.

will be in view to add to the attractiveness of the package. Small berries look their best when the top layers are placed in rows with stems down. A few sprays of bright-green strawberry leaves placed on top of each crate after the boxes have been placed therein add greatly to the appearance of the package. And be sure that the bottom and middle of the boxes are composed of just as high-class berries as those at the top. Honest packing creates and maintains the grower's trade.

Summing Up

IN summing up the whole proposition of strawberry growing, it is simply a matter of highly productive plants, well prepared soil and thorough cultivation. Strawberries can be grown with less experience and less work than any other kind of fruit. Some of the largest yields are reported to us by beginners, who have had no experience in or knowledge of this line of work except that which they learned through this book. They simply followed instructions and used common sense. Everything was done in the right way and at the right time, and we hope that what we say in this edition of "Great Crops of Strawberries and How to Grow Them," will stimulate all who read it to get right down and do their dead level best to grow big crops of big red berries.

Questions and Answers

IN writing a book of instructions, we realize how difficult it is to cover every point. We also realize that your conditions may be different from ours and that after you read this book it may be necessary for you to write and ask some questions which concern you most. We shall be glad to have you do this whenever

it is necessary, but we trust that before doing so you will have carefully read what we have said in preceding pages of this book. That is, before writing us be very sure that we have not covered in what has preceded this paragraph the very point you have in mind, and much more fully than we could do in a personal letter.

But if you fail to find that we have informed you in these pages, then kindly make your questions as brief as possible, and put them on a separate sheet, properly numbered. This will greatly aid us in giving you just the information you desire. You may rest assured that we shall take great pleasure in cooperating with you in this most delightful and profitable work.

The Apology Is Accepted

IN the spring of 1914 we received a letter from J. S. Beardsley complaining that some plants received from us were not up to standard. From certain points mentioned in his letter we knew he had "mixed us up" with somebody else, and asked him if this were not so. Some days later we received the following from Mr. Beardsley:

"Pardon me for making the error in regard to your strawberry plants. Those you sent me are fine, are growing well and are in blossom now. On looking the matter up I find the poor ones were from ——— Nursery Co., ———, Iowa."

The apology is duly accepted, and we are very glad to know that the Kellogg plants sustain their reputation, as Kellogg plants un-failingly do when properly treated.

Suggestions About Shipments

BE SURE to give explicit instructions as to the way in which you wish to have your plants shipped.

Never order plants to go by freight. Express rates have been greatly reduced during the past year, and the parcel-post service steadily improves.

Express charges never need to be prepaid in order to secure a lower rate. Under the new regulations imposed by the Interstate Commerce Commission the rate is the same whether prepaid or paid on delivery.

If you know that your plants have been a long time on the road, insist upon examining them before accepting them. If packages are injured, have express agent give you a written statement setting forth the actual condition. If plants are short, have the agent so state.

Many small towns have no express agent. Be sure that your station has an agent before instructing us to ship to that point. In cases where there is a railroad station but no express office, instruct us to put upon the package, "Put off at Owner's risk."

THE annual edition of "Great Crops of Strawberries and How to Grow Them," is mailed to our customers between January 1 and 10, as a rule, and should be delivered, therefore, to the remotest part of the country within ten days. If your name is on our list, it will be unnecessary for you to ask for the book—at least until after ample time has elapsed for the book to reach you.

KELLOGG'S PREMIER, THE NEWEST AND BEST EARLY VARIETY

KELLOGG'S Premier is an early bisexual very rich in fertile pollen. The fruit begins ripening with the earliest varieties and comes into full fruit with early varieties and continues to fruit until the latest varieties are at their best. The Premier berries are larger than those produced by any other early variety. The fruit is deeply and richly colored and very firm, which makes it a splendid shipper. As to productiveness, no other early variety equals it, and the quality of the fruit is simply superb. The foliage is light green, grows tall and spreads completely over its load of fruit, which protects the berries from the sun. We never have seen a berry affected by sun-scald or rot on this variety. The leaves are smooth, bright and clean. Premier is a good runner maker and easily handled in the fruiting bed. All who have seen this variety in fruit pronounce it the greatest of all early varieties. In a word, it is the Premier of all early strawberries. We have purchased the exclusive right to propagate and sell this variety, and the only plants now in existence are on the Kellogg farms at Three Rivers, Michigan. We have only a limited number of plants, most of which will be reserved for our own planting. Our object is to give this variety a wide distribution so that it may be thoroughly tested throughout the United States and Canada. In view of this fact, we shall not sell more than 25 plants to any one customer. The price will be \$2.50 for 25 Premier plants.

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

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TYPICAL SPECIMENS OF "HEARTS OF GOLD" SEED-TYPES

THE "Hearts of Gold" cantaloupe seed we are offering is pedigree seed, grown from melons of the same perfect type as shown above. The seed is sun-dried and cured under a subdued light and even temperature, just the same as is used by Col. Morrill for his own planting. Col. Morrill has spent ten years in breeding up this cantaloupe to its present state of perfection. In size the fancy melons are about eighteen inches in circumference; the meat is about two inches thick. Under Col. Morrill's method of selection, which involves the rejection of all imperfect specimens, the seed is more costly than ordinary seed, but pedigree seed always is worth more than it costs. We believe we are opening up an important opportunity to our customers in offering seed of this wonderful origination. Success is certain where our instructions are followed.

\$300.00 to \$500.00 Per Acre in Five Months

Hearts of Gold Cantaloupes

WILL give you a net profit of \$300.00 to \$500.00 or more per acre in five months from date of planting. This celebrated cantaloupe was originated by America's greatest cantaloupe specialist, Col. Roland Morrill. Mr. Morrill also originated the "Rocky Ford" and Osage melons. All cantaloupe growers will admit that Col. Morrill's originations are the best cantaloupes ever produced, and the fact that Col. Morrill is now growing the Hearts of Gold variety exclusively is conclusive evidence that the "Hearts of Gold" is the best and most profitable of them all.

All dealers who handle the "Hearts of Gold" cantaloupe declare that it is the sweetest, richest and most delicious cantaloupe that has ever come to their market. Mr. Scheid, Kalamazoo's leading grocer, in 1913, handled the "Hearts of Gold" cantaloupe from the beginning of the season until the season was closed, and he has advised us that he never found a single poor melon. These cantaloupes were shipped to Detroit, Buffalo, Cleveland and Chicago in carload lots during the season of 1913, and the dealers of these cities, who have been handling cantaloupes grown in all districts for many years, declare that the "Hearts of Gold" cantaloupe comes the nearest to perfection of any cantaloupe they have ever handled. And while Mr. Morrill had 70 acres of the "Hearts of Gold" here at Three Rivers in 1913 and

40 to 50 acres at his Benton Harbor farm, he was unable to supply the demand.

While other cantaloupes were being sold at a price that barely paid freight and icing charges, the "Hearts of Gold" cantaloupes were netting Mr. Morrill all the way from \$500 to \$750 per car. Mr. Morrill claims that he has never made less than \$300 per acre from cantaloupes and has made as much as \$700 per acre.

On account of Col. Morrill's wonderful success with the "Hearts of Gold" we feel that we are rendering our customers a positive favor by arranging with Mr. Morrill to supply them with seed of this melon. And those who will plant the seed and give the plants good care will find them very profitable. Col. Morrill could supply us with only a limited amount of this seed, but as long as it lasts we will furnish the seed to our friends at the following prices:

Sufficient seed for one acre.....	\$8.00
Sufficient seed for ½ acre.....	4.50
Sufficient seed for ¼ acre.....	2.50
Sufficient seed for family garden.	1.00

We explained in our 1914 book how careful Mr. Morrill is in selecting seed from the most perfect melons for his planting and by his methods of seed selection how he has built up this melon to perfection. We showed photo-engravings of two of these melons and gave a brief description of Mr. Morrill's method.

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

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A SINGLE HILL OF "HEARTS OF GOLD" CANTALOUPE

COUNT the melons and you will find an even dozen in this hill, ten of which sold as "fancy." One single carload netted Mr. Morrill in the season of 1914 \$803.10, and it was not a big car, either. And a most interesting fact in this connection is that at the very time this sale was made, the market was glutted with other melons that did not bring even the freight charges. 'Hearts of Gold' never lack a ready market.

This brought to us a great many inquiries for the seed, but heretofore Mr. Morrill has refused to sell any of the seed at any price, stating that he was making so much profit from this cantaloupe that he did not care to invite competition.

What Leading Dealers Say

The past season, 1914, Col. Morrill had 105 acres of "Hearts of Gold" cantaloupes here at Three Rivers and 40 to 50 acres at his Benton Harbor, Michigan, farm, and with this increased acreage he was unable to fill all the orders that came to him. Dealers who handled the "Hearts of Gold" cantaloupe in 1913 contracted for the sale of these melons for 1914. These contracts were made while the 1913 crop was being harvested, which is very unusual, and would not be the case unless the "Hearts of Gold" possessed superior quality.

A. J. Bloomgarden, a commission merchant of Detroit, Mich., wrote under date of August 15, 1914: "I could have sold very easily this week ten carloads of 'Hearts of Gold' cantaloupes, each car containing a thousand packages, and am very sorry you were unable to supply them."

Cohen & Company, the well-known commission house of Chicago, writing under date of August 22, 1914, say: "The business of our firm is that of supplying the leading hotels, clubs, restaurants and dining cars with the very finest eatables the market affords at all seasons of the year, and for several years we have had

exclusive control of Mr. Morrill's fancy 'Hearts of Gold' brand of cantaloupes for the city of Chicago. We feel safe in saying that the average net price on these cantaloupes has been at least double that of any other brand on the market. Our trade is the most exacting on earth, and nothing but the highest quality gets the money."

F. Brennisen & Co., of Buffalo, N. Y., writing on August 15, 1914, say: "The car of 'Hearts of Gold' cantaloupes we have just handled was certainly something elegant—the finest eating melons it ever has been our pleasure to eat, and this is the opinion of all of our trade."

Myers, Weil & Co., of Cleveland, Ohio, write: "Your 'Hearts of Gold' cantaloupe is not only the best seller, but it is the best cantaloupe on the Cleveland market."

How to Grow Hearts of Gold Cantaloupes

The soil for cantaloupes is prepared the same as for strawberries. If you have well-decayed, fine manure, you may work a forkful into each hill before planting. The hills should be 4x6 feet, which will give 1,700 hills per acre. Planting should be done after danger of frost is over, which is generally the middle of May. When cultivating and hoeing disturb the vines as little as possible and cultivate shallow close to the plants and deeper in the center of the space between the rows. Each hill will produce from 4 to 16 salable melons. The price ranges from 5c to 15c each. We counted the melons on three adjacent hills and found 36 fancy melons on the three hills. These melons

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WARREN, ONE OF THE NEW ORIGINATIONS OF QUALITY

THIS splendid variety is, to use his own language, "the last and best" origination of the late S. H. Warren of Auburndale, Mass. Mr. Warren was famous as a strawberry grower and originator for fifty-eight years, and no other man has done more for strawberry improvement in the line of originating and disseminating valuable varieties than he. We therefore take great pleasure in presenting to our patrons this unusual variety. Our stock is from plants purchased direct from Mr. Warren during his lifetime, and we are confident that his own experience will be repeated in the case of our customers who purchase "Warren" plants. One expert in strawberries who visited Mr. Warren's home plot reports: "During the summer of 1912 it was my good fortune to see the 'Warren' in fruit on Mr. Warren's ground, and the splendid crop of large, luscious, highly colored and uniform-shaped berries was an inspiration to anyone interested in strawberry growing." The plants are exceedingly vigorous, with strong, leathery foliage of dark green. The calyx is of light green, and adds greatly to the attractiveness of this extraordinary variety. "Warren" won the silver medal at the Massachusetts Horticultural Show in 1912—a tribute to its qualities of highest value and of itself a guaranty of preeminence and fruiting power. Grown only at Three Rivers, "Warren," by the way, is medium-early as to season, and is a powerful bisexual. Don't fail to give this variety a thorough test.

sold at wholesale at 12½ cents each, or at \$1.50 per hill.

Let us assume that each hill produces only five melons and that the price averages 5c each. This would give 25c per hill, and 1,700 hills per acre would give \$425. We give these figures to show how conservative we are in estimating the net profit at \$300 per acre in five months from planting. Five acres planted to "Hearts of Gold" cantaloupes and strawberries will make more money than the most of farmers are now making from 160 acres in farm crops. The melons begin ripening about the middle of July and continue to ripen throughout August and September. Here at Three Rivers the last picking was made last year October 15th.

As the "Hearts of Gold" is a trade mark duly registered in the patent office at Washington, we are selling the seed under the following agreement arranged between Col. Morrill and the R. M. Kellogg Company, and the public is hereby warned that Col. Morrill will prosecute anyone else offering his seed for sale, or for in any other way infringing upon his rights by the use of his name. The seed of the Hearts of Gold, therefore, may be procured from no other source than the R. M. Kellogg Company, as we have the exclusive right to sell the seed of this wonderful cantaloupe. Following is the contract:

THIS IS TO CERTIFY, That I have made arrangements with the R. M. Kellogg Company of Three Rivers, Mich., under which that company has the exclusive right to sell seed of my "Hearts of Gold" cantaloupe, and that seed of this variety may be purchased from no other

source. Any person offering for sale cantaloupe seed under the name of "Hearts of Gold" will be prosecuted, as this name is protected by copyright and trade-mark, which applies to both seed and melons.

Under this agreement the price has been fixed by me as follows:

Seed for one acre, \$8.00; one-half acre, \$4.50; one-fourth acre, \$2.50; family garden, \$1.00.

The seed will be put up in the size packages as indicated above, and will not be sold in less quantities. Under no circumstances may the R. M. Kellogg Company deviate from this schedule.

Let me say that any strawberry grower who will plant an acre or more of these cantaloupes never will regret doing so. "Hearts of Gold" cantaloupes and strawberries make an ideal combination.

(Signed) ROLAND MORRILL.

The "Hearts of Gold" cantaloupe is a beautifully netted melon of large size averaging twice as large as the "Rocky Ford" variety. The meat is of deep golden color. The flavor is rich, sweet and delicious, and when all of the flesh is eaten the rind is nearly as thin as a potato peeling. Every melon is a good one and when a customer once tastes the "Hearts of Gold" he will come back for more. The "Hearts of Gold" always is sold on its own merits and never in competition with other cantaloupes.

Strawberry Plants Do Not Mix

"WILL not different varieties mix when set in close proximity one with the other?" is a question that comes to us hundreds of times each season.

Strawberries will not mix any more than different varieties of apples set out in the same

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A TRIO OF JOCUNDAS

IT would be difficult to find a variety that has won success over a wider field than that now occupied by Jocunda. For years it was the most popular variety in the high altitudes of the inter-mountain states; indeed, to such a degree that it was set exclusively in some sections of Colorado. Its fine qualities led us to test it out at Three Rivers, and the result is that we find it is just as desirable in other sections as it is in the higher altitudes of the Rocky Mountains. Jocunda is of the perfect strawberry form, is very hardy, and has a leaf-tissue so tough as to make it a strong resister of insect pests and fungous diseases. It is a powerful bisexual, and an excellent mate for pistillates of mid-season. Grown at Three Rivers and Twin Falls.

orchard will mix. All mixing is done in the seeds—neither plant nor fruit is affected. The seed of a Delicious apple will not reproduce a Delicious apple tree; no more will a Clyde strawberry seed reproduce a Clyde strawberry plant. In both cases something entirely unlike may safely be counted on.

One may set in the same field as many different varieties of strawberries as he chooses without the identity of a single variety becoming affected.

Many times we are asked to supply strawberry seed. The above will indicate of how little value strawberry seeds would be under these conditions.

The Functions of Soil Bacteria

WE ALWAYS have urged the necessity of making soil conditions favorable to the multiplication of soil bacteria, and the following from the pen of Howard S. Reed, professor of bacteriology in the Virginia Agricultural College, so emphasizes this point that we quote it here for the benefit of our customers:

“When the rock-layers disintegrate to form soil they ordinarily produce a soil which contains all of the ordinary elements required for plant food except compounds of nitrogen; for of this latter class the rocks contain none. Yet, when productive soils are analyzed—for example, the so-called virgin soils—they are found to contain large quantities of nitrogenous material—as much as five thousand to ten thousand pounds an acre—to a depth of one foot. Chemists are unanimously agreed that all of this nitrogen has been derived in some way from the large store of gaseous nitrogen

in the air and that the major part of it has been accumulated through the bacterial action and the growing of certain plants.”

Herein lies the strength of the argument for the use of lime in a proper form. Whenever the soil is acid, the bacteria cannot work, hence there is a lowering of fertility. Destroy the acid, sweeten up the soil and you set the bacteria at work at once. Professor Reed also explains the relation of bacteria to humus:

“Though humus is extremely important, both as a chemical and as a physical agent in promoting soil improvement, its usefulness does not end there. Humus contains different elements, one of which is very essential to plant growth, namely, nitrogen. This humus-nitrogen, as such, is of practically no use to green plants, but must undergo transformation. Most, but not all, cultivated plants thrive best when nitrogen is furnished to them as nitrate, such as saltpeter or nitrate of soda. One class of bacteria has labored to convert the plant tissues into humus; subsequently another class of bacteria must lay hold on the humus and bring about a decomposition of the humus, with liberation of the nitrogenous compounds and formation of new products.”

And don't let anybody make you believe that an acid soil is congenial to the strawberry. It is true that the strawberry is very hardy and will endure much, but lime is as essential to the growing of big crops of big red strawberries as it is to the development of a crop of clover or alfalfa, or any other crop. In fact, the only thing we know that acid soil is good for is sorrel and other weeds of that nature.

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A KELLOGG STRAWBERRY GARDEN ON THE GROUNDS OF MIKE LUNN, OF AUBURN, IND.

Kellogg's Big Red Strawberry Garden

250

Plants Composed of 50 Plants Each
of Five of Our Leading Varieties

\$3.00

ONE of the most popular offerings we ever have made, and the one which has created the most widespread interest is the strawberry garden, which for the last two years we have offered to our patrons, and which we again offer for the season of 1915. The strawberry garden for 1915 will be composed of 250 plants, carefully selected with a view to the location of the particular customer; that is to say, the garden selection will be composed of plants particularly adapted to the soil and climatic conditions of the individual purchaser.

The letters we have received from our friends are very gratifying to us, and we have the pleasure of knowing that this small investment of cash has in innumerable cases resulted not only in great satisfaction to our customers, but they also have found the garden a source of generous profit. They write us that they have secured from the plants composing their garden not only large quantities of fine fruit for table use at fruiting time, but that they have had an ample supply of fruit for preserving in one form or another for winter, and in many instances they have sold their surplus berries at very generous prices.

Every farmer should have one of these

strawberry gardens unless he grows the fruit on a larger scale. It will be a great aid to the housewife on the farm in preparing her three meals a day. Strawberry shortcake and strawberries and cream are a great treat to any family, especially when the berries are picked when perfectly ripe fresh from the vines. What is true of the farmer is equally

true of those who live in town and have a small garden plot or a generous sized back yard in which to grow their own strawberries. We have sold a very large number of these "gardens" to people who reside in towns and some of them in the larger cities of the country.

Kellogg's Big Red Strawberry Garden will produce from 250 to 350 full quarts of strawberries each season.

If you were to buy at market prices the berries this garden selection will produce for you, it would cost you from \$25 to \$35 each year, and berries you buy are seldom as fresh and delicious as those that are grown right in your own garden.

Not only do we select plants to meet the particular requirements of different sections of the country, but we observe great care in the proper mating of varieties; that is to say, all pistillates which we include in the garden will

SEND us \$3.00 and we will select for you a strawberry garden that will produce more berries than your entire family can eat, summer and winter. This garden will be composed of 250 plants selected from four or five of our choicest varieties—those which are especially adapted to your section. You can have strawberries and cream, shortcake, jam, preserves and canned berries the year round, and you can sell enough berries to pay for the garden and the sugar used in putting up your winter's supply of delicious canned fruit.

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

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A KELLOGG STRAWBERRY GARDEN ON THE GROUNDS OF W. T. BROWN, OF WORCESTER, MASS.

be properly mated by bisexual varieties so as to insure a full crop of fruit from every plant.

No one who has a plot of ground big enough to set out plants should be without our garden. We are confident that if you will let us send you one of them, you will never again be without it. Order early so as to be sure to secure the very best selection we can make.

Transportation of Strawberry Plants

SINCE our 1914 book was issued there have been many changes in the parcel-post service. Among these are important reductions in rates in the first and second zones and smaller reductions in the more remote zones. January 1, 1914, a new ruling went into effect regarding the weight of packages. The limit of weight was increased to fifty pounds in the local, first and second zones, and to twenty pounds in all other zones. In addition to these changes the postoffice department announced that large packages would be carried outside of mail sacks, and this has resulted in a considerable increase in the number of consignments of strawberry plants and other nursery stock by mail.

February 1, 1914, the express companies met the activities of the postal department by a severe cut in express rates. The new rates were passed upon by the Interstate Commerce Commission, and probably are as just and fair as anything that may be devised.

Under the new rule of the express companies it makes no difference as to cost whether the express charges are prepaid or paid at the point of destination. Therefore, it never is necessary to prepay express charges. In the case of mail, however, it always is necessary to prepay postage, and as there is such wide

variation in the weight of plants both because of the difference in the weight of varieties and the wide difference in weight at different seasons, we have found the only practicable way to determine the parcel post charge is to strike an average weight to the thousand plants.

Taking a large number of orders, as they went forward in 1914, we found that the average weight of plants grown at Three Rivers was so close to 30 pounds to the thousand as to make that figure a just average. Therefore, in estimating the amount of postage to include in the order which is intended to go by parcel post, note the charge per pound from the Three Rivers zone into your zone (your local post-office will supply the information), and you will then be able to remit the amount of our charge for postage when ordering plants, thus avoiding unnecessary correspondence.

The average weight of plants grown at Twin Falls, Idaho, is 35 lbs. to the 1,000 plants.

The average weight of plants grown at Canby, Oregon is 50 lbs. to the 1,000 plants.

Special Delivery by Parcel Post Insures Quicker Delivery. We advise all our patrons who have their plants come forward by parcel post to include 10c for each parcel and have the plants come forward by special delivery.

Where packages go by special delivery they travel with first-class mail, and this frequently means from 24 to 48 hours' earlier delivery than otherwise would be the case. For very long distances the difference in time would be even greater than that above indicated.

STRAWBERRY growers may well profit by the sage suggestion contained in the following paragraph which we find in a Farm Journal advertising booklet: "The big strawberry defies the laws of gravity when it bobs up on top of the box!" Worth thinking over.

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OUR TESTING AND SELECTION BED AT CANBY, OREGON

KELLOGG plants grown in Idaho and Oregon receive the same care in the matter of selection and restriction as do those grown at Three Rivers. The above scene illustrates the health and vigor of our western-grown plants. It was from this Oregon farm that we shipped an entire carload of plants in the season of 1914 to a single customer in California. He ordered more than 50,000 additional plants after receiving a carload.

Kellogg's Great Branch Farms in the West

THE increasing interest shown by our friends in the Kellogg branch farms located at Twin Falls, Idaho, and Canby, Oregon, finds expression, not only in a flood of appreciative letters, but in increasingly large orders. One California customer alone ordered in 1914 a full carload of our Oregon-grown plants, involving nearly 500,000 plants, and after their arrival sent us a large additional order, saying: "Car arrived in good shape, and plants were surely fine. Am so well pleased with them that I am sending another order for 50,000 additional plants." This was a tribute to Kellogg quality and methods of handling orders that was most gratifying.

Not only is our business growing at both farms, but we are glad to be told that our plants have created new and increasingly larger fields because of the extraordinary results our Western friends are getting from their strawberries. Higher prices and better yields always follow the introduction of Kellogg plants in any territory, and this has been true to a remarkable degree in the vast section supplied by our Western farms.

Not the least interesting fact is that the ever-bearing plants seem to take to that part of the country in a very remarkable way, and in response to the growing demand we have this year produced an increasing number for that trade. No one can afford to leave the ever-bearers out—they do all and more than we claim for them.

Women in the Strawberry Field

ONE element in the growth of our business is the steadily increasing number of women who grow Kellogg's strawberries, and the splendid success they are making of the

work. All over this great land of ours the work is being carried forward—some for pleasure, others as a means of earning "pin money"; but the greater number go about the work with the serious purpose of gaining a livelihood. What other field offers a more generous invitation? We know of no other task that lends itself so naturally to the feminine mind and muscle than does the work of growing strawberries for market, and there certainly is nothing else that opens up so wide a field or such possibilities of profit.

We do not have to prove the truth of these statements, for we can bring so much testimony from the women themselves as to convince the most skeptical that all we say about it is more than realized in the cases of many of our own customers, a few of whom we take pleasure in quoting as to their own experiences:

Osage, Iowa, July 19, 1914.—It gives me pleasure to report how the plants purchased from you in 1913 "panned" out. I set 1,000 plants—500 each of Warfield and Bederwood. Never have I seen such vines and so heavily loaded with berries as they were. Not only did they yield well, but they commanded the highest prices I ever received. My berries brought 18 cents a quart when others sold for 15 cents, and from the thousand plants I sold \$113.70 worth of berries.

Miss E. A. Hendry.

Bowling Green, Ky., July 9, 1914.—Your plants I set this year are wonders to men who drive over the county when they compare them to the plants grown in many fields where plants were bought through the Association and planted many weeks before those that came from your farm. While our last rain fell May 8th—62 days ago—yet many runners have made and some of them have roots two inches long.

Miss Hattie Grider.

Ellensburg, Wash., Dec. 30, 1913.—It gives me pleasure to state that the thousand plants I purchased from your company in 1912 yielded in 1913

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A CARLOAD OF KELLOGG THOROUGHbred PEDIGREE PLANTS

73 crates, each crate containing 24 quarts, making a total of 1,752 quarts. This doesn't include the quantities of berries canned at home and given away, nor the berries that were left on the vines after the patch was abandoned when the picking grew scarce. The berries were beautiful. Here is my cash sales' account:

18 crates @ \$1.75		\$31.50
2 crates @ 1.65		3.30
53 crates @ 1.50		79.50

Total, \$114.30

Expenses incurred 15.20

Net cash results, \$99.10

I wish to place another much larger order with you for plants for setting next year.

Inez A. Webber.

Reed's Ferry, N. H., Feb. 15, 1914.—From the 200 plants set out in 1912, and after the frosts had killed the greater part of the first bloom, I sold 160 quarts of berries beside using all that my family required. I then mowed off the bed, and in the fall of 1913 had a beautiful strawberry plot with which to start the next season.

Mrs. D. W. Sullivan.

Webster Groves, Mo., June 25, 1914.—The 5,000 strawberry plants bought from you last spring, arrived April 12, the day after shipment was made. They were in first-class condition. It is a smart way you have of packing them. Have cultivated them since setting about every ten days. They have had no rain since April 27 and now (June 25) they look just grand.

Mrs. E. L. Nollan.

We might go on indefinitely multiplying instances of this sort, but the selections from letters above given will indicate the point we desire to make. No woman having free access to a plot of ground but can, while preserving her own dignity and continuing to maintain the home, make a field of strawberries a source of self-support, and in a manner befitting her nature; and, by expanding her field of endeavor, make her strawberries the source of a generous income.

OUT of his long experience in strawberry work, E. H. Cooley of Wichita, Kansas, says that the best varieties for the Southwest are Splendid, Warfield, Senator Dunlap, Burbach, Sample and Aroma. This statement is based upon a careful test of 150 varieties, cov-

ering a period of twelve years. He adds that Warfield leads as a money maker, and that Aroma is the best of the late varieties in that section.

Irrigating the Strawberry

ONE of the very interesting developments in the strawberry field relates to their production under irrigation. It is safe to say that for every crate of berries grown under that method ten years ago there are at least fifty crates grown today. For irrigation no longer is confined to the so-called "dry" regions of our country—irrigation now is practiced on an important scale in every state in the Union. Gardeners, who produce intensively and who cannot afford a short crop once in five or even in ten years, have found complete insurance in an irrigation plant that supplements Nature and which, in some respects, excels Nature. During the great drought of 1913 those who were fortunate enough previously to have installed a plant found themselves taking larger profits than ever, while their less enterprising neighbors were almost "bowled out" by the severity of the long and super-heated term.

One of these fortunate ones who is a member of the big "Kellogg Family" of strawberry growers, reports that in an ordinary year he "made enough money to pay for his irrigating plant from the berries he picked after the fields of other growers in his region were completely exhausted of fruit." This friend has an over-head system, and his fields are "rained" upon just as Nature performs the task whenever he wills to do so. All he has to do is to set the gasoline engine in motion, turn on the spigot—and the field enjoys the refreshment and tonic effect which water alone may supply to thirsty plants and suffering fruit.

Out in the mighty "dry belt" of this big land of ours vast fields of strawberries are grown, and all along the Pacific coast strawberries ripen from early in the season to very late.

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

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KELLOGG'S THOROUGHBREDS IN SOUTH DAKOTA

FROM H. O. Olen of Dell Rapids, S. D., comes the illustration shown above, but Mr. Olen says in his letter that this extraordinarily fine picture does not do the plants justice. He continues: "I dare say that I have the finest strawberry patch in Minnehaha county. It is the admiration of all who see it. Nothing but Kellogg's Thoroughbreds for me."

The larger proportion of these strawberries are grown under irrigation. Thus it becomes a vital matter to the Western strawberry folk to practice that system of watering plants that insures the best results.

It has been our experience in Idaho that setting plants in the dry soil and turning on the water afterward is altogether the most satisfactory way. This encourages the rapid settling of the soil about the roots of the plants, and their immediate and rapid development, which in turn insures big crops of fruit.

There is nothing in the work of growing plants under irrigation that should cause anyone to hesitate to undertake it. In setting out the plants a furrow should be made where each row of plants is to be set. A horse-drawn implement is used, known as a corrugator—a two-wheeled implement it is, with adjustable wheels of iron, shaped somewhat like an automobile tire and about the same size. For strawberries the wheels should be adjusted to make two corrugations at a time, forty-two inches apart. Then set out the plants as would be done anywhere, turn the water on, as above described, and let it run through the corrugations until the soil is thoroughly soaked all around the plants. This will furnish sufficient moisture to start the feeding roots.

Leave the furrows undisturbed until after you irrigate the plants again, or until the plants have attained sufficient growth to make a row across the field so plain that you can follow it easily while cultivating. Then cultivate as soon as the soil will permit, and continue cultivating every week or ten days until the plants indicate that they require more moisture; then irrigate again.

Continue irrigating and cultivating in this manner throughout the entire growing season, irrigating, of course, only as moisture is needed. This easily may be determined by the appearance of the plants, also by the appearance of the soil when you dig into it.

The preparation of the soil and all other work

connected with the growing of strawberries is the same in an irrigation country as in any other.

The Ever-Bearing Strawberries

WE prefer to call these remarkable plants "ever-bearers" for the reason that the term "fall-bearers" is an inadequate description. These plants bear a generous crop in the early summer, and then, after a month or so of rest during the hot, dry weather of mid-summer, they again become active and yield a continuous crop from that time until freezing weather comes on. Therefore, if the title of ever-bearers is not exactly correct, it is more nearly so than the title that apparently limits their season of production to the fall months.

Notwithstanding that the ever-bearing plants have been known since 1889, when Samuel Cooper of New York developed a single plant, with eleven runners attached, into the famous Pan-American variety; and although these plants are now grown by millions with complete success and large profit in nearly every section of the country, there is still no little skepticism in the minds of the general public regarding them and their value as producers of fine fruit. This attitude should not continue in the face of the great commercial success that the more progressive growers are enjoying, and we hope our customers and friends who have not as yet engaged in their cultivation may no longer hesitate to take advantage of the very large opportunity afforded by the lengthening of the fruiting season of the strawberry grower, and his increased profits arising therefrom.

Letters from our friends who have had experience with the ever-bearing plants are practically unanimous that they are the most profitable of all varieties. Consider why this is so: You set out the ever-bearing plants at the same time in the spring that the standard varieties are planted—say April. From four to five months afterward a generous crop of fruit begins to ripen and the plants continue fruiting until freezing weather checks further activity along that line. Then in the spring the ever-bearers begin to bloom with the standard varieties and yield as heavy crops of fine and delicious fruit as do the most prolific of the regular varieties. In one word, you have had two crops of high-class fruit within fourteen months after the plants were set. It is safe to say that nothing else in the fruit world

KELLOGG THOROUGHBREDS ON THE WAY

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

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BUSTER, FEMALE OR PISTILLATE-MEDIUM

As its name implies, Buster is a breaker of records in many sections of the country. It is becoming especially popular north of the Ohio river, where it has won distinct fame for its vigor of growth and reliability under adverse conditions. Especially is it noted for its immunity from frost. Our Canadian friends, as well as those in the New England states, find the Buster perfectly adapted to their particular conditions. This is the fifth year we have offered Buster to our customers, and we find it necessary to set a larger acreage to this variety each succeeding season. Grown only at Three Rivers.

compares with these results, whether one grows the fruit for pleasure or for profit.

That the cost of the plants is somewhat higher than that of the regular varieties is rendered a negligible factor when the increased yields and profits are considered. They are as dependable in every way as are any other plants, and everybody appreciates the fact that strawberries in late summer and autumn command the highest price.

Our crop of ever-bearing plants this season is unsurpassed in size and quality, and we congratulate ourselves upon the fact that we were able to secure a generous quota of Mr. Cooper's latest originations, known respectively as "Advance," "Forward," and "Onward." These three varieties, in addition to the great quartet already known to thousands of our customers—"Americus," "Productive," "Progressive" and "Superb"—comprise a combination of excellence that may not be duplicated anywhere else in the strawberry world. Order early and as heavily as possible, and you will make no mistake.

Growing the Ever-Bearers

EVER-BEARING strawberry plants are treated in much the same way as are the regular sorts, excepting that the ever-bearers are permitted to develop a generous crop of fruit in the fall after setting. The plants are set out in the spring at the same time the standard varieties are planted. As they are very active in making blossoms the buds must be picked off until the plants are well established (say about July 1st), after which allow

them to bear and they will furnish abundant fruit throughout the autumn season.

As to cultural methods, they are the same with ever-bearing varieties as with standard varieties. If you set well-developed plants of the ever-bearing varieties and put them into well-prepared soil and give them good care, the plants will, as a rule, yield enough berries the first fall to pay the cost of the plants, and if the season is favorable, the income will take care of all the expense. This is greatly in favor of the ever-bearing varieties.

Ever-bearing varieties, like other varieties, should not be permitted to fruit longer than two years; that is they should be allowed to mature five crops of berries. From plants which are set in the spring of 1915 your first crop will be in the fall of 1915, the second crop in the early summer of 1916, another in the fall of 1916, and these will be repeated in 1917.

There are few standard varieties grown that will yield a larger crop of berries in the early summer than the ever-bearing varieties, and the fall crop frequently is as large as the spring crop. At Three Rivers the ever-bearing varieties yield their first crop early in June. This crop is very heavy. The berries are extra large and of fine quality. The fruiting season during the early summer lasts about four weeks. The fall crop begins to ripen in August and there is a continuation of fruiting throughout August, September, October and November. We have picked berries as late as Thanksgiving, and the fruit is generally just as large in the fall as it is in the early summer, and only the latest fruit shows a diminishing quality. It is our opinion that the ever-bearing varieties will revolutionize the strawberry business, but we would not advise anyone to discard the old standard varieties. The standard varieties always have been profitable and will continue to give generous returns to growers who give them proper care.

What Our Customers Say About the Ever-Bearers

HEREWITH are a few out of hundreds of letters that have come to us from our customers all over the country. No one may question the interest and enthusiasm they manifest:

Peoria, Ill., July 27, 1914. Plants were received April 18th in excellent condition and just as ordered. I did not lose a plant except what the grubs got, and I think I got the grubs. My ever-bearing "Superbs" are certainly named right—they are doing fine and if we would get some rain I soon would be eating "short-cake."—W. R. Randall.

Franklinville, N. Y., July 11, 1914. The 500 Superb plants ordered for last spring setting arrived in fine condition. I never saw finer and more vigorous plants. I have not lost a single plant except about a dozen taken by the grubs. We have had an extremely dry season since they were set and yet the runners are setting profusely.—C. W. Hogue.

Norton, Kansas, Oct. 10, 1914.
R. M. Kellogg Co., Three Rivers, Mich.
Gentlemen: I must tell you of the great pleasure my visit to the great Kellogg farm gave me. After reading the accounts of your ever-bearing plants I felt that I must go clear from western Kansas to Three Rivers and see for myself if such plants really existed and actually produced such fine fruit as you describe in your

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

Copyright 1914, by R. M. Kellogg Co., Three Rivers, Mich.

OUR PARCEL POST PACKAGE

Illustrating the careful manner in which we do up small packages of Kellogg plants for parcel post delivery.

book. Seeing is not only believing—it is knowing—and when you gentlemen took me into the great fields and I had the pleasure of picking for myself all of the luscious fruit I could eat from those wonderful ever-bearing vines, all doubt in my mind disappeared, and I can only express my delight and wonderment at the extraordinary success you are having with this new order of plants that must result in such large advantage to strawberry growers all over the country. I have never eaten more luscious fruit than those I picked from the ever-bearing vines on your farm.

I am going to have some of those ever-bearers next year and from the observations made on your farm on October 1st I am convinced that there will be large profit in them.

Incidentally, I take great pleasure in saying that I find every statement you have made in your book concerning these plants and the magnitude of your farm and the way in which you handle strawberry plants was more than borne out in my own actual experience and observation.

Very truly yours, G. P. Mann.

Vancouver, Wash., Sept. 15, 1914. The ever-bearing strawberry plants sent me last spring came in fine shape and grew finely. Have had berries from them since July 14. The plants are still in bloom in spite of the fact that we had 74 days without rain—the longest drouth ever known here—records kept for 43 years.—C. L. Freeman.

From a personal letter written by Henry Rager of Grovesport, Ohio, to John Geiger of Three Rivers in September, 1914, we quote the following: "I must tell you about the ever-bearing strawberries I bought of the Kellogg Company. Out of 50 plants I lost only one, and right now I am selling the strawberries from those plants at 35c a quart and they are big, luscious berries, and the plants are still full of blooms and ripe berries. Just think of it! I only got these plants in the spring of 1914."

Fergus Falls, Minn., Sept. 27, 1914. Our fall-bearing strawberries are doing so finely that we

have run short of boxes, and I wish you might be able to send us some at once.—J. P. Federline.

Lamoni, Ia., June 2, 1914. I thought you might be interested to know about my Progressive ever-bearing plants obtained from you last April. Out of the 350 plants I never lost one, and now the plants are very large, with as high as five crowns to one plant. In fact, I never have seen a patch of plants that would compare with them, and yet it has been dry here all through May. But constant cultivation and rich mellow soil have made them boom. Yours must be an excellent system to produce such splendid plants, and your fair and honest treatment has added to my interest in growing them for best results.—J. W. Barr.

The Kellogg Selections

THE KELLOGG SELECTIONS are for the benefit of those who wish to leave the selection of varieties to us. A great many of our customers, especially those who are just beginning to grow strawberries, prefer to leave the selection of varieties to our judgment rather than to assume the responsibility of making their own choice. We are very glad to assist our friends in this manner, and if you will write and give us the dimensions of the piece of ground you wish to set to strawberries and tell us what kind of soil you have, we shall be pleased to make up an ideal selection of varieties for you. We will choose varieties especially adapted to your soil and climatic conditions and also will select varieties that mate well together. We will then write and tell you how many plants it will require to set your piece of ground and give you a list of the varieties we have selected with full information as to how to set the different varieties to insure perfect pollination. All experienced strawberry growers know that it is very important to have varieties that are adapted to their soil and climatic conditions and that the varieties must be properly mated to insure a big crop of perfectly formed berries. We look after these details for our customers and those who leave such matters to us will have their interests looked after in a manner that will insure success. This line of work is a part of our Service Department, which is for the express purpose of helping others, and you may rest assured that we will do everything we can to merit your confidence and to make you a continued Kellogg customer as well as an ardent Kellogg booster.

Here is a typical case, showing the complete satisfaction of the customer with the selection made for him. The purchaser in this case is G. M. Estes of Cairo, Mo., and writing under date of February 15, 1914, he says:

"Two years ago you figured us out a strawberry bed, sending us 1,400 plants for \$10.00. They did just fine. Now we wish to set out a new bed to cost us from \$15 to \$20, and would like you to figure us out another order that will give us the most plants for that sum of money. We wish that the order shall include early, medium and late varieties, and make us a list showing how to set them.

"Also send a copy of your catalogue to the friend whose name and address I enclose."

Mr. Estes is more than satisfied. He is interested to see that his friend has a catalogue so that he, too, may be sure of getting some of the plants that gave him such fine results.

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

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KELLOGG PLANTS ON THE GROUNDS OF M. M. SHEFFERLY, ONTARIO, OHIO

IN sending us the photograph from which the above engraving is made Mr. Shefferly says: "I wish to send you a few words regarding the 5,000 strawberry plants I bought from you this spring. Out of the 5,000 I lost only seven plants. The patch is a prize winner—never before has there been such a fine patch in this country."

Yields in Quarts and Dollars

225 Quarts From 200 Plants

Sprague, Wash., Feb. 28, 1914. The plants I received in 1912 and 1913 were the finest I ever saw. Last year I raised 225 quarts from the 200 Glen Mary and William Belt plants bought and planted that year.

J. A. Hargrave.

375 Quarts From 300 Plants

East Butler, Pa., July 1, 1914. One year ago I bought of you 300 plants, and I have just finished my picking. I picked off 300 plants 375 quarts. They were the finest berries I ever saw, and I will want some more plants in the spring.

D. W. Sutter.

Made \$125.00 From Quarter of an Acre

Macedonia, Ohio, July 20, 1914. I had a dandy crop this year. Made \$125.00 from less than one-fourth of an acre. They were William Belt, Senator Dunlap and Chesapeake. The plants I got from you this spring are doing fine.

Charles Ahrens.

212 Quarts From 25 Square Feet

Fredonia, Kans., March 14, 1914. I produced last year, on a plot of ground 25 feet square, 212 quarts of strawberries and of prime quality. This was from plants received from you in the spring of 1912. I find for family use I want to get about 100 plants from you every two years, using the plants but two seasons. Then in the fall of the second bearing year, spade them up and plant again direct from your fresh stock.

B. E. La Dow.

Sold \$30.00 Worth From a Small Plot.

Aberdeen, Sask., Canada, March 10, 1914. I got some of your strawberry plants and was more than pleased with them. Sold \$30.00 worth of

strawberries from them, and such large and fine ones!

Mrs. E. Campbell.

New York

Painted Post, May 22, 1914. I now have one acre of strawberries, and am intending to set another acre. My Kellogg Brandywines and Clydes are white with bloom. I never before saw so many blossoms on a strawberry plant, and I have been in the fruit business for ten years.

Mrs. Lewis M. Depew.

Burlington, Me., Jan. 7, 1914. I bought 2,000 strawberry plants from you in the spring of 1912. They cost me \$10.00. In the summer of 1913 I sold my berries from these plants in my home town at 15 cents throughout the season, and made between \$75 and \$80. It was a good investment. I shall send for more plants this year.

John C. Hodson.

Kellogg Plants Universally Successful

EVERY year we receive inquiries, the purport of which is, "Will your plants do well in this state?" The best answer to this question, it appears to us, is to let customers tell their own stories of the success they have achieved with our plants. No one can read these brief extracts from letters received from those who know from actual and practical experience what wonderful success they have had with these plants without being fully convinced of their universal nature, and that we can supply varieties that will grow anywhere that good soil exists and proper cultural care is given them. And no one will fail to note

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

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KELLOGG THOROUGHBREDS GROWING IN NEW MEXICO

IN 1912 Cristobal Moya of Old Albuquerque, N. Mex., purchased 1200 Kellogg plants which were shipped him from our Twin Falls, Idaho, farm. Writing us under date of September 9, 1914, Mr. Moya says: "I am well satisfied—more than satisfied—with your fine strawberry plants. I grew a fine crop of berries, the best ever grown in New Mexico, from the plants you sent me in 1912. This season I gathered 1300 quarts of big red berries from those plants. It was a regular gold mine. I realize that the photograph I send you doesn't do justice to those beautiful plants. They stand at least 15 inches high and under those plants are pieces of gold."

the enthusiasm with which our patrons go about their work, and the deep enjoyment they get from results achieved. If you are not already one of that large, happy and progressive group which comprises "the Kellogg Family," you can do nothing better than to join it, and there is no time like the present for doing so. You will be cordially received, and your best interests faithfully served.

Alabama—Bessemer, May 25, 1914. The first of April I received a shipment of strawberry plants from you. They arrived in good shape and I set them out as early as possible after receiving them. I was more than pleased with the plants. I think every plant lived. Everybody that sees my plants says that they are the finest patch of berries they have ever seen.

Claude Odell.

Arkansas—Mena, March 9, 1914. The shipment of plants you sent me while at Cove produced the finest berries ever shipped from that place. Your plants adapt themselves to the soil and grow from the start.

Mrs. Julia Weirauch.

California—Corona, December 24, 1913. The 11,000 plants which you shipped arrived in splendid condition and were satisfactory in every way.

C. S. Hoss.

Colorado—Edgewater, April 30, 1914. We are pleased to state that the plants arrived in fine shape. They are certainly self-recommending in point of quality. We shall be pleased to recommend your plants to all our friends.

H. F. Vulliet.

Illinois—Oak Park, April 26, 1914. My strawberry plants were received in good condition. Thank you for your promptness in sending them. I have had great success with your plants.

Mrs. D. Forbes.

Indiana—Holton, May 2, 1914. Received my strawberry plants April 16. They were in fine condition. I am perfectly satisfied.

Peter Meisberger.

Iowa—Rudd, February 1, 1914. I have grown Kellogg berries for twenty years for my table, and some years had a large surplus from my garden patch. I would not think of giving any other berries the time required to try to make something of them if I could possibly get Kellogg's.

Mrs. L. H. Bishop.

Kansas—Oakland, May 4, 1914. Your shipment of plants received in good shape. Plants were set out the next day. They are sure a fine lot of plants—every one alive and doing well.

Fred Ludington.

Kentucky—Pewee Valley, April 21, 1914. I received the strawberry plants three days after you shipped them. They were very fine plants. Of the 1,100 plants you sent, every one is living and growing finely. Allow me to thank you for your prompt shipment.

W. H. Metzler.

Maine—South Portland, April 24, 1914. I received the 500 strawberry plants April 22, 1914. They came to me in fine condition and are splendid plants. Thanks for prompt shipment.

Philip S. Melcher.

Maryland—Westminster, May 18, 1914. I got the 1,500 strawberry plants and they are doing finely.

Bailey Burns.

Massachusetts—Wauquoit, April 30, 1914. Received my plants April 28 in splendid condition and thank you very much. I shall recommend your plants to all my neighbors.

M. J. Oliver.

Michigan—Bay City, May 5, 1914. Strawberry plants arrived all O. K. yesterday morning, and we planted them in the afternoon. This morning they held up their little heads as if they would say: "We all intend to grow nicely, as we like your place here." Thank you for your promptness and kindness.

B. Ruf.

Minnesota—Ceylon, February 21, 1914. My plants last year arrived in fine shape. They were fine plants. Did not lose a single plant. I have one of the finest fields of strawberries in the country.

George W. Myers.

Missouri—Mound City, April 28, 1914. Your berry plants (1,000) came duly to hand. I am

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highly pleased with them—the best plants I ever saw. No such plants ever before have been shipped here.
E. L. Pattin.

Montana—Bozeman, June 4, 1914. The plants which I recently ordered from you arrived in first-class condition. I was much surprised and pleased at the size and strength of the plants.
R. A. Barnes.

Nebraska—Ansley, March 9, 1914. With pleasure I now send you a small order for plants. I think I know what I am to get, as I have bought plants from you for eighteen years, more or less, and they were always good—couldn't be better.
Nate Hoover.

New Hampshire—Hanover, May 8, 1914. I am very much indebted for the plants you shipped May 5th. It is easy to see why your name is known all over America as the best people to buy strawberry plants from.
E. Gordon Bill.

New Jersey—Hilton, May 13, 1914. The last shipment of plants arrived today. The previous one of 15,000 came to hand Saturday the 9th. All arrived in excellent condition, and the plants are the finest ever seen in this part of the country—admired by all who have seen them. Please accept our thanks for all favors in connection with our order. The plants are fine.
J. C. Stilwell.

New York—Franklinville, July 11, 1914. In the spring of 1912 I set an acre of your strawberry plants. Last year it brought me in over \$300 in the face of the worst drouth known in this vicinity. It was my intention to plow up the field this spring, but I finally decided to let it remain and see what it would do. We simply pulled the weeds out of it once, and although we have not had a single rain for some time before the fruiting season began, it has brought me in over \$400.
C. W. Hogue.

Ohio—Gypsum, September 25, 1913. We ordered 12,000 plants from you last spring, which we received in excellent condition. It was very hot and dry at the time of setting and we were in doubt about their coming. But they did remarkably well, in spite of the continued dry weather, when the runners were setting. We think your selection and care of plants has been responsible for their fine growth.
C. L. Achor.

Oklahoma—Braman, March 21, 1914. I have got plants from many other places, but I must not give 25 of your plants for 1,000 plants that I have from any other firm. I have never lost one of your plants out of 50, and yours will yield three times as many berries and much larger. In fact, you will, after this, receive all my orders.
W. R. White.

Oregon—Eugene, March 18, 1914. I received the strawberry plants all right in good condition and am well pleased with them. They are sure fine ones.
T. W. Circle.

Great Bend, March 30, 1914. I send you an order for strawberry plants, as I know the quality you send out. I have had some of your plants and they produced the best berries ever grown in this section, and were most prolific and satisfactory.
A. S. Benedict.

Tennessee—Nashville, April 20, 1914. Order No. 9898 received April 18th in fine condition. Set out promptly while it was cloudy and then received a good, drenching rain. They are growing "to beat the band" already.
C. S. Ball.

Texas—Hillsboro, March 1, 1914. The plants ordered from you some time ago, and which you shipped from your Oregon farm, arrived in fine condition in spite of the fact that they were on the road seven days. I never have seen nicer or more vigorous plants.
W. G. Escott.

Utah—Salt Lake City, April 16, 1914. The berry plants arrived all O. K. just one month ago, and they were the finest plants I ever saw. I have not lost a single plant, which is great, I think.
D. A. Affleck.

Middletown Springs, May 15, 1914. I received the strawberry plants sent May 4th, the evening of the 6th. Set them out the next day. Such splendid plants I never saw. Not a poor plant in the 1,500. They already have commenced to grow.
Mrs. Claude Barden.

Virginia—Luray, April 25, 1914. Please pardon delay in acknowledging the strawberry plants,

MORE THAN \$2,000 PER ACRE

THE scene herewith is of the garden of W. H. Davis at Durango, Colo. Mr. Davis is a railroad man who has specialized in strawberries, using the Kellogg Senator Dunlap plants for the work. Some months ago he sent us a letter signed by several railroad officials and his neighbors, testifying to the fact that the field shown in the engraving, comprising approximately 700 square feet, yielded 244 quart boxes of exceptionally fine fruit. This was at the rate of \$2,196 per acre. Mr. Davis's experience with strawberries has led him to consider engaging extensively in the work of strawberry growing. He believes that the possibilities along this line are excelled in no other line of horticulture, and his admiration for Kellogg plants knows no bounds.

which were very fine indeed. Heavily rooted and strong crowns. Many thanks. Every plant is starting off nicely and it looks as if they will be money-makers.
D. N. Cave.

Washington—Palouse, September 5, 1913. My Kellogg berries beat anything on this market for quality, and I sold them at better prices than anything shipped in from Spokane.
J. T. Arnold.

West Virginia—New Cumberland, April 28, 1914. I received the plants which you shipped the 13th inst. on the 15th, and set them. They started new growth within three days.
C. Hahn.

Wisconsin—Milton, May 1, 1914. I am proud of my strawberry field. It is planted to as fine a looking bunch of berry plants as I have ever seen. Every one seems full of life and vigor.
M. A. Drew.

Wyoming—Thermopolis, June 27, 1914. In the spring of 1913 I got plants from you for a small patch. We are all so pleased that we want to set a larger patch. Our neighbors all think our little patch is the greatest thing they ever saw, and it will not hurt the Kellogg plants here.
L. J. Suhig.

CANADA

British Columbia—Victoria, March 7, 1914. Received 4,000 plants in good condition. They are certainly very fine plants—the best I have ever seen, having such well-formed roots. A very choice lot.
H. D. Cotton.

Ontario—Gowanstown, May 28, 1914. We received the plants that you sent in good condition and every plant grew. I can recommend them to anybody.
Mrs. B. F. Knipe.

Prince Edward Island—Albany, May 4, 1914. The strawberry plants sent by parcel post arrived by rural delivery this morning in fine condition.
Allan MacQuarrie.

Quebec—Montreal, February 27, 1914. I have had good luck with your plants in Canada on heavy clay land. The berries I grew here were simply wonderful. I would be afraid to say how many boxes I picked from a small plot about half the size of a tennis court.
N. M. Lash.

Brief Descriptions of Varieties We Carry But Which Are Not Illustrated in This Edition

EXTRA EARLY VARIETIES

Excelsior, B. (Male)

EXTRA-EARLY. Bisexual. This variety grows generous crops of dark-red berries, quite tart, but of high quality when grown in the South. It is one of the most popular varieties in the Gulf region, where commercial growers produce it year after year because of its high qualities as a shipper. Form, color and flavor are retained for many days after picking. Grown at Canby and Three Rivers.

St. Louis, B. (Male)

EXTRA-EARLY. Bisexual. This new candidate for public favor is a recent origination giving large promise of success, and is a distinct addition to the extra-early class of strawberries. For home use it is unexcelled, but we do not recommend it for shipping purposes. Have you ever seen a Delicious apple? The shape of that apple, with its five little points at the bud end, suggests the St. Louis. We recommend our customers to try out this worthy addition to our list.

August Luther, B. (Male)

EXTRA-EARLY. Bisexual. Famous as a prolific yielder of finely formed and deliciously sweet fruit, this variety has won great distinction in all sections of the country, but is particularly popular on the Pacific Coast. The berry is bright colored, medium large in size, round in form, tapering to an obtuse point. We have supplied a very large territory with this variety for fifteen years. Grown at Three Rivers and Canby.

Michel's Early, B. (Male)

EXTRA-EARLY. Bisexual. This is the twenty-third season we have offered this universal favorite. Of excellent flavor, never very large in size, but thoroughly dependable, Michel's Early has won for itself a permanent place among the commercial growers covering nearly every section of the country. Rich crimson in color, this color extending almost evenly over the entire surface, varied as to form from top-shape to round, it is an ideal variety both for its excellence as a table berry and as a shipper. It is quite as popular in the home garden as it is in extensive fields. Grown only at Three Rivers.

Climax, B. (Male)

EXTRA-EARLY. Bisexual. The berries of this variety are rich red, conical in shape and have a glossy and very beautiful surface. There are few varieties more attractive on the market than the Climax. It is popular with commercial growers because the flesh is firm, making it a strong shipper, and is rich and juicy and of extremely

delicious flavor. This is the tenth year we have offered Climax to our trade and it has won great favor in many sections of the country. Grown only at Three Rivers.

Texas, B. (Male)

EXTRA-EARLY. Bisexual. Berries are crimson, big and glossy, with dark-red cheeks shading to rich cream. Firm of flesh, it is popular among commercial growers for its ability to stand long-distance shipping. The meat is rich, juicy and the flavor distinctly tart. It is not particular as to soil and climate, but yields generous crops in practically all sections of the country. Grown only at Three Rivers.

Virginia, P. (Female)

EXTRA-EARLY. Pistillate. This variety has a steadily growing popularity in the Southern states, yields generous quantities of fine fruit, the form of which is almost always round, the berries hanging pendant on powerful stems held high by the massive plant. Fruit ranges from scarlet to crimson. It is a splendid shipper, a heavy yielder and a deep rooter. Longfellow is a perfect mate for Virginia. This is the seventh year we have been breeding this variety. Grown only at Three Rivers.

EARLY VARIETIES

Highland, P. (Female)

EARLY. Pistillate. Highland is famous for its large yields of berries, which resemble very closely those of the Crescent, the fruit of Highland being somewhat larger, however. In color it is a bright scarlet, and the flesh is red throughout. We do not recommend this variety for long-distance shipping. This is the fourth year we have carried this variety on our lists. Grown only at Three Rivers.

Missionary, B. (Male)

EARLY. Bisexual. For the second time we are offering this comparatively new but already popular variety to our trade. Along the Atlantic seaboard and in all of the Gulf states it already is recognized as a variety of highest value. We expect that in the next few seasons it will become as well and as favorably known throughout the Northern and Central states as it is now in the Eastern and Gulf states. The berries of this variety are very large and beautiful in form; this variety is especially noted for its extremely heavy yields of fruit. It is one of the hardest varieties known, and is also very popular with commercial growers because of its splendid shipping quality. The foliage of this variety is a light green and is very fine in every way. We hope that all customers in Eastern and Southern states may include an order for the Missionary in their 1915 consignments. Grown only at Three Rivers.

Heritage, B. (Male)

EARLY. Bisexual. Heritage is one of the largest and finest berries grown, and being a heavy yielder as well, steadily is winning its way to a permanent place in the confidence of strawberry growers representing practically every section of the United States. In shape the berry is conical and long, having an obtuse point. In color it is dark, lustrous shade of crimson, and is studded with brilliant, golden seeds, all of which tend to make it one of the handsomest berries ever shown on the market. This is the fourth year we have offered Heritage. Grown at Three Rivers only.

Bederwood, B. (Male)

EARLY. Bisexual. No higher tribute need be paid this variety than to say that this is the twenty-seventh year we have grown it, and that it steadily increases in popularity in northern latitudes and in high altitudes. In color the berry is a delicate crimson, having a glossy surface, in which are embedded bright, yellow seeds. In

A PENNSYLVANIA PATCH OF HELEN DAVIS

FRED KOMORA of Schwenksville, Pa., is very proud of his fine field of Helen Davis strawberry plants. He writes that his plants have done much better than we claim for them, the yield being much larger than he anticipated. He adds: "The fall-bearing plants I bought from you last spring have just commenced to bear, and all the other plants bought from you are doing fine." Good plants, good care, good yield.

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

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size the berries are medium, and in addition to their excellent flavor are famous for fine shipping and canning qualities. It has a long blooming season and is a strong fertilizer. Grown only at Three Rivers.

Lovett, B. (Male)

EARLY. Bisexual. The fact that this is the twenty-second season we have offered this old favorite should be a sufficient indication of the esteem in which it is held. This variety produces large berries, deep crimson in color, which for the most part are conical in shape. The flesh is a dark, rich red and very juicy. It is a great shipper, retaining form and color for many days after picking. Grown only at Three Rivers.

Clyde, B. (Male)

EARLY TO LATE. Bisexual. For twenty years this variety has been propagated on our farms, and its universal popularity is indicated by the fact that it has shown itself to be successful in all Northern states and from southern California to northern British Columbia on the Pacific Coast. Of late years it has become an especial favorite with the California trade, one very extensive grower in that state having adopted Clyde as his sole variety, after testing out more than fifty other varieties. It is a strong pollinizer of pistillate varieties. Grown on all our farms.

Tennessee Prolific, B. (Male)

EARLY. Bisexual. One of the sweetest and most delicious berries ever originated, and as prolific as it is excellent. Medium large, bright crimson and, for the most part, long and corrugated in shape, the berries of the Tennessee present an inviting sight when neatly packed and placed upon sale. It is an excellent shipper and is equally popular as a canner. This is the twenty-sixth year we have offered this great variety. Grown only at Three Rivers.

Wolverton, B. (Male)

EARLY. Bisexual. This variety has won a host of admirers during the twenty-four years we have offered it to our customers, and there always is steady demand for this variety in the sections where it is best known. Crimson in color, perfect in form, it is very attractive to the eye, and its delicious flavor is pleasing to the palate. It is one of the richest berries grown. Grown only at Three Rivers.

Crescent, P. (Female)

MEDIUM EARLY. Pistillate. For twenty-nine seasons we have offered this extraordinary pistillate to our customers, and the fact that its popularity never has waned is the highest tribute we can pay to its general excellence. In size the berries are medium and the larger proportion of them are broad wedge-shape, tapering to a dull point. In color the fruit is excellent, the flesh is close-grained and solid, the flavor is deliciously tart and the berry exceedingly juicy. Crescent ranks very high both as a shipper and canner and is a prime favorite for table use. You always may count upon large yields of fine fruit from this variety. Grown only at Three Rivers.

Staples, B. (Male)

EARLY. Bisexual. This is the third season we have offered Staples to our customers, and it already has won high popularity. Resembling in some of its characteristics the old and popular Warfield, it has the added advantage of being a strong bisexual. It is of perfect-strawberry form, ranging from rich crimson to deep wine in color. Staples has what we may call the true strawberry flavor and is deliciously tart. One of our customers who ranks among the large commercial growers of the country has adopted Staples and Longfellow as the sole varieties grown for his trade. Grown only at Three Rivers.

Jessie, B. (Male)

EARLY. Bisexual. Among growers who aim to produce fancy strawberries and who find their soil well adapted to its production, Jessie ranks among the leaders. Under right conditions it is one of the most satisfactory varieties produced by commercial growers. It is an extremely heavy yielder of highest quality fruit and adds to these advantages that of being an excellent fertilizer for early pistillates. Grown only at Three Rivers.

CHESAPEAKE, MALE OR BISEXUAL—LATE

THE above illustration presents a typical Chesapeake, a variety that is steadily winning popularity over a wide range of territory; indeed, the demand for this strawberry now extends from the Atlantic to the Pacific. As its name indicates, it is a Maryland origination, and for a long time its virtues were known only to the people of the Atlantic seaboard. Now it is universally known and admired for the large size of its fruit, its heavy yielding powers, its fine flavor, which is similar to that of Wm. Belt, and because of the rust-proof quality of its foliage. Another characteristic which is particularly reported on by our customers is its ability to withstand frost and drought. In a recent season, when frosts of great severity came on at an early date, Chesapeake was the only variety that remained unaffected. Chesapeake ranks among the greatest of the late varieties. Grown at all our farms.

MEDIUM VARIETIES

Lady Thompson, B. (Male)

EARLY TO LATE. Bisexual. A general favorite everywhere throughout the Gulf states and making fine success in all sections south of the Ohio River. Lady Thompson is bright red in color, and is shaped like a top, tapering to an obtuse point—a perfect strawberry form. Berries are medium large; the seeds are red and add much to the appearance of the fruit when packed neatly for market. The meat is solid pink in color and deliciously rich in flavor. This is the thirteenth year we have offered Lady Thompson to our trade. Grown only at Three Rivers.

Splendid, B. (Male)

EARLY TO LATE. Bisexual. The name of this variety is typical of the quality of fruit it produces. Large of size, round in shape, bright red in color, it is one of the most attractive varieties when placed on the market. Around the edges the fruit is bright-red, this color extending about one-third of the way to the center, when it changes to creamy white. Splendid is a strong bisexual and its season of bloom is very long. Throughout the Inter-Mountain and Southern states Splendid is a universal favorite. This is the fifteenth year we have bred this variety. Grown only at Three Rivers.

Parsons' Beauty, B. (Male)

MEDIUM. Bisexual. A universally popular variety. Parsons' Beauty is especially adapted to the higher altitudes and colder sections of the country. It is popular in the Northwest Territories of Canada, in all of the Rocky Mountain states and throughout the northern states of New England. The berries of this variety are bright-red and are of mild and delicious flavor. An extra-strong shipper, it also is a very attractive variety when placed on sale. This is the twelfth

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year we have had this variety on our lists. Grown at Three Rivers and Twin Falls.

New York, B. (Male)

MEDIUM TO LATE. Bisexual. This variety produces exceptionally fancy fruit and always commands the highest prices in the cities. New York is bright blood-red in color with a shiny surface, and has seeds of nearly the same color so deeply embedded as to be almost invisible. In flavor the fruit is very mild. It is a prolific yielder and has a long ripening season. This is the fourteenth year New York has been under our methods. Grown only at Three Rivers.

Sharpless, B. (Male)

MEDIUM-LATE. Bisexual. Very much like Bubach in color and shape, the Sharpless has held its place among long-time growers for many years. In color it is a bright-red and its shape varies widely. The berries are large, the vines produce medium-size crops of rich and delicately flavored fruit, and from many sections of the country comes a uniformly strong demand for plants of this old-time variety. Grown only at Three Rivers.

Ohio Boy, B. (Male)

MEDIUM-EARLY. Bisexual. This variety is of recent origination, but already has won generous recognition from strawberry growers of the Central Western states. Our own experience at Three Rivers has convinced us that it is a variety that will hold a permanent place among extensive strawberry growers. It yields large quantities of dark-red berries, this color extending from circumference to center, and it is possessed of a rich flavor that makes it very attractive to the trade. Grown only at Three Rivers.

Clark's Seedling, B. (Male)

MEDIUM. Bisexual. Clark's Seedling was originated by Mr. Clark near the city of Portland, Oregon, and attained its early popularity under the name as here given. Very soon, however, it was almost universally adopted by strawberry growers in the famous Hood River region, and it was not long before it was known from one end of the continent to the other as the "Hood River." Therefore, in considering Clark's Seedling, please remember that it is identical with the "Hood River" variety. Its popularity is based primarily upon its extraordinary shipping qualities. Hundreds of carloads of this variety are shipped from the Pacific Coast to as far east as Chicago and arrive there in excellent condition. It is a heavy yielder of fruit and is a fine canner as well as shipper. The fruit is large, of perfect strawberry form for the most part, and where given ample sunshine and air always wins high favor. The foliage is medium large, dark-green with spreading habit. We do not advise Clark's Seedling for the Eastern states, but cannot recommend it too highly for the Inter-Mountain and Pacific Coast sections. Grown at Twin Falls and Canby.

Jerome, B. (Male)

MEDIUM EARLY. Bisexual. Growing rapidly in popularity throughout the Eastern states, Jerome also is becoming universally popular in the Rocky Mountain regions. The berries of this variety are bright-red, rich in flavor, and are splendid shippers. Jerome also is a strong pollinizer of pistillate varieties, and these numerous and important qualities promise to make it one of the most famous and generally grown varieties in the regions indicated. Grown at Three Rivers and Twin Falls.

Enormous, P. (Female)

MEDIUM TO LATE. Pistillate. This is the nineteenth year we have offered Enormous to our customers, and we know of no better test of its qualities than its steadily increasing popularity with those who know it best. Under just the right conditions of soil and climate this variety grows such very large berries as to have won the name given it so many years ago. Not only is the berry large, but it is of fine flavor, the meat is juicy and rich, and its crimson color makes it very attractive when placed upon the market. Grown only at Three Rivers.

Downing's Bride, P. (Female)

MEDIUM TO LATE. Pistillate. Among growers whose practical experience with this variety has taught them its great value, Downing's Bride ranks as a leader in the production of large quantities of strictly fancy fruit.

Its berries are dark blood-red and its flavor delicious, with only enough white at the very heart to make a pleasing contrast. This is the twelfth year we have carried this fine variety. Grown only at Three Rivers.

Enhance, B. (Male)

MEDIUM TO LATE. Bisexual. A variety very popular over a large section of the United States. Fruit is large and firm and of excellent quality. Foliage large and fine, and seldom is affected by rust or blight. Strong pollinizer. Often fruits in the fall. Grown only at Three Rivers.

Arizona, B. (Male)

MEDIUM-EARLY. Bisexual. For twelve years we have grown Arizona in our breeding beds, and it is popular all over the country. This variety is a producer of great quantities of large, deep-red berries of very fine, aromatic flavor. The foliage of this variety is dark-green and is of medium size. Under favorable conditions Arizona frequently produces a fine second crop in the early fall, and this fact has made it doubly popular where such conditions are common. Grown only at Three Rivers.

Nick Ohmer, B. (Male)

MEDIUM TO LATE. Bisexual. For many years a favorite throughout the Northern and Atlantic-Seaboard states, Nick Ohmer has during the last three years won almost universal popularity among the extensive strawberry growers of the Pacific Coast. More than that, it now ranks among the first selections in the Gulf regions of the country. In a word, Nick Ohmer has become practically a universal favorite. This means that the average grower may with entire confidence order extensively of this variety. Especially noted for its fine rich flavor, for its large, well-shaped berries and rich crimson color of its

A KELLOGG THOROUGHbred RUNNER PLANT

THE above illustration will give one some idea of the root and crown development of the plants we ship to our customers. They are "real live ones." And every plant yields heavily if given a fair chance.

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

Copyright 1914, by R. M. Kellogg Co., Three Rivers, Mich.

FENDALL, FEMALE OR PISTILLATE

THE above half tone of a Fendall berry is representative of the usual form of this remarkable pistillate. Originated in Maryland, a seedling of the Wm. Belt, it has distinguished itself in thousands of fields, scattered from Maine to California, during the eight years it has been before the public. It has a record of 16,800 quarts to a single acre, which few varieties of either sex ever have excelled. There is no state in the Union in which this variety has not been grown with success. With such a record it is useless to urge its introduction into a still greater number of fields, and if you never have grown Fendall it will pay you to try it out in 1915. Grown on all our farms.

fruit, it isn't strange that this variety becomes immediately popular once it becomes known in a given locality. The foliage is quite as beautiful as the fruit. This is the sixteenth year we have bred this great bisexual. Grown at Three Rivers and Canby.

Klondike, B. (Male)

MEDIUM. Bisexual. The popularity of this variety steadily increases. Originating in the South it was for a long time considered as a strictly Southern variety, but steadily it has advanced in popularity until today it is grown with large success as far north as the Straits of Mackinac and is becoming an almost universal favorite on the Pacific Coast and throughout the Inter-Mountain states. This variety is noted for its large yields of beautiful berries uniform in shape, rich blood-red in color and having a flavor that is neither sweet nor sour, but mildly delicious; the berry is full of juice. This is the twelfth year we have offered this variety to customers, and we note a steady increase in its popularity. Grown at Three Rivers and Canby.

King Edward, B. (Male)

MEDIUM-EARLY. Bisexual. Although of recent origination, this variety has won deserved fame over a very large part of the country, and while this is only the second year we have offered this variety to our customers, we do so with full confidence that it will give large results in all cases where soil and climatic conditions are favorable. The variety is so very fine as to deserve a thorough testing out. The fruit is almost round in shape, is dark-red in color, delicious in flavor and of unusual uniformity as to size. Possessed of such a list of high qualities, we are sure that King Edward is to rank very high among the practical strawberry growers of the country. Grown only at Three Rivers.

Molena, B. (Male)

EARLY TO LATE. Bisexual. Some years ago one of the extensive commercial strawberry growers of California called our attention to the

Molena as a berry particularly adapted to that state, and very kindly sent us a number of plants for testing out. We have found this variety all our friend claimed for it and it is now winning notable success all along the Pacific coast. In fact, in the strawberry region lying south of the city of San Francisco it is a universal favorite, and we are confident that its popularity is to extend from the extreme south of California to northern British Columbia. Molena grows a berry rich crimson in color, the form varying, but the size of the fruit being uniformly large. In flavor it is rich and satisfying, and its yield of crops is excelled by few varieties. It is a prolific maker of long runners and is a strong pollinizer. Molena is grown only at Canby.

LATE VARIETIES

Dornan, B. (Male)

LATE. Bisexual. For fifteen years we have bred this great variety, which is especially appreciated for its sub-acid quality that renders it possible for the confirmed dyspeptic to freely partake of its fruit with impunity. In color the berries are dark-red on the upper side, shading to bright-red on the under side. The meat is for the most part deep pink, becoming almost white at the center. It grows generous crops, and never have we known anyone who did not enjoy its rich and delicious flavor. The berries are very large and belong distinctly in the fancy class. Grown only at Three Rivers.

Brandywine, B. (Male)

LATE. Bisexual. Brandywine belongs to the list of the universal varieties that thrive under all sorts of conditions of soil and climate. Added to this extraordinary quality is its beautiful berry, in color deep blood red to the center, the surface being imbedded with bright, yellow seeds so prominent as to make a beautiful contrast in color. The fruit possesses a flavor peculiar to itself and attracts and holds customers year after year. The productiveness of this variety equals its attractiveness as to size and beauty, rendering it very popular with commercial growers everywhere. This is the twenty-second year we have bred Brandywine under our methods of selection and restriction, and we do not hesitate to place it among the very great varieties. Grown on all our farms.

Stevens' Late Champion, B. (Male)

LATE. Bisexual. During the seven years we have been growing this variety our confidence in its unusual value has steadily increased. One of its fine qualities is the universality of its habitat, as it is successfully grown in every state of the Union. Another quality of large interest is the fact that it is one of the latest varieties; and a third is the fact that it grows immense quantities of the finest market berries. Its late bloom renders it immune to late spring frosts, and it is in full fruit when many others of the later varieties have finished their fruiting season. Grown only at Three Rivers.

Magoon, B. (Male)

LATE. Bisexual. This variety is particularly adapted to Pacific Coast and Inter-Mountain state conditions and is grown by us only on our farms at Twin Falls, Idaho, and Canby, Oregon. From the far western districts Magoon is shipped in carload lots to Chicago and other eastern markets after nearly all other varieties have quit fruiting. Magoon grows large berries of very rich flavor and bright red from circumference to center. It is found to be especially valuable in Oregon, Washington and British Columbia.

Sample, P. (Female)

LATE. Pistillate. Sample is one of the heaviest yielders known, and to this very important quality is added that of beauty, this variety being famous for its exceedingly fine appearance on the market. Not only is it large of yield, but it is famous for its size of fruit, which is bright red and top-shaped, the narrow part being a very deep scarlet, and the meat rich and juicy, as well as highly flavored. The seeds turn red as the berries ripen, and so nearly resemble the color of the berry as to be scarcely visible. The stem and calyx are small and remain a bright green for days after the berries have been picked.

(Concluded on Page 62)

Price List of Strawberry Plants for 1915

Read Carefully This Page and the Inside Cover Pages of
This Book Before Making Out Your Order.

IN MAKING UP YOUR ORDER for plants, do not vary from the scale of prices as given on this page. No customer is allowed to combine two or more varieties in order to secure the rate of the combined number. For example, should you order 500 Wm. Belt plants, the price would be \$3.00; but if you order 250 plants of Wm. Belt and 250 plants of Glen Mary, the price of the 500 plants would be \$3.70, as you will note that the price of 250 Wm. Belt is \$1.85 and the price of 250 Glen Mary also is \$1.85.

Always follow the price list exactly as given. Because you order 500 plants or more of a given variety and thus secure the 1,000 rate on that variety, does not entitle you to take the 1,000 rate on a smaller number of any other varieties ordered. Thousand rates are allowed only in cases where 500 or more plants each of a variety are ordered.

If you will follow the price list just as shown on this page it will save you and ourselves much trouble and expense.

One hundred plants of \$4-per-thousand plants always cost 70 cents, no matter if you order ten thousand plants of other varieties, and 100 plants of a \$5-per-thousand variety cost 80 cents—and so on throughout the price-list table. The price table is so arranged that anyone can tell at a glance the price of the plants desired.

No order will be filled save in accordance with prices as quoted; therefore any changes made from those prices can result only in unnecessary correspondence.

Varieties of Plants Priced at \$4.00 per 1000 will be sold in lesser quantities at the following prices:	Varieties of Plants Priced at \$5.00 per 1000 will be sold in lesser quantities at the following prices:	Varieties of Plants Priced at \$6.00 per 1000 will be sold in lesser quantities at the following prices:	Varieties of Plants Priced at \$10.00 per 1000 will be sold in lesser quantities at the following prices:	Varieties of Plants Priced at \$15.00 per 1000 will be sold in lesser quantities at the following prices:
Price	Price	Price	Price	Price
25 plants...\$.30	25 plants...\$.35	25 plants...\$.40	25 plants...\$.70	25 plants...\$ 1.00
50 plants... .45	50 plants... .50	50 plants... .60	50 plants... 1.05	50 plants... 1.55
75 plants... .60	75 plants... .65	75 plants... .80	75 plants... 1.40	75 plants... 2.00
100 plants... .70	100 plants... .80	100 plants... .95	100 plants... 1.70	100 plants... 2.50
125 plants... .80	125 plants... .95	125 plants... 1.10	125 plants... 1.95	125 plants... 2.85
150 plants... .90	150 plants... 1.05	150 plants... 1.25	150 plants... 2.20	150 plants... 3.25
175 plants... 1.00	175 plants... 1.15	175 plants... 1.40	175 plants... 2.45	175 plants... 3.60
200 plants... 1.10	200 plants... 1.30	200 plants... 1.55	200 plants... 2.70	200 plants... 4.00
225 plants... 1.20	225 plants... 1.40	225 plants... 1.70	225 plants... 2.95	225 plants... 4.35
250 plants... 1.30	250 plants... 1.55	250 plants... 1.85	250 plants... 3.20	250 plants... 4.75
275 plants... 1.40	275 plants... 1.65	275 plants... 2.00	275 plants... 3.45	275 plants... 5.10
300 plants... 1.50	300 plants... 1.80	300 plants... 2.15	300 plants... 3.70	300 plants... 5.50
325 plants... 1.60	325 plants... 1.90	325 plants... 2.30	325 plants... 3.90	325 plants... 5.80
350 plants... 1.65	350 plants... 2.00	350 plants... 2.40	350 plants... 4.10	350 plants... 6.10
375 plants... 1.75	375 plants... 2.10	375 plants... 2.55	375 plants... 4.30	375 plants... 6.40
400 plants... 1.80	400 plants... 2.20	400 plants... 2.65	400 plants... 4.50	400 plants... 6.70
425 plants... 1.85	425 plants... 2.25	425 plants... 2.75	425 plants... 4.65	425 plants... 6.90
450 plants... 1.90	450 plants... 2.35	450 plants... 2.85	450 plants... 4.75	450 plants... 7.10
475 plants... 1.95	475 plants... 2.40	475 plants... 2.95	475 plants... 4.90	475 plants... 7.30
500 plants... 2.00	500 plants... 2.50	500 plants... 3.00	500 plants... 5.00	500 plants... 7.50
1000 plants... 4.00	1000 plants... 5.00	1000 plants... 6.00	1000 plants... 10.00	1000 plants... 15.00

Runner Cutter with Handle, \$2.50. Runner Cutter without Handle, \$1.85. Dibbles, 35c each, 3 for \$1.00.

1915 Price List of Varieties of Strawberry Plants Grown by R. M. Kellogg Co., at Three Rivers, Michigan

EXTRA-EARLY	Per 1,000
Excelsior (B)	\$4.00
St. Louis (B)	6.00
August Luther (B).....	5.00
Early Ozark (B).....	6.00
Michel's Early (B).....	4.00
Climax (B)	4.00
Texas (B)	5.00
Virginia (P)	6.00
Longfellow (B)	6.00

EARLY

KELLOGG'S PREMIER (B)

EACH 25 PLANTS, \$2.50

Highland (P)	5.00
Warren (B)	6.00
Missionary (B)	6.00
Heritage (B)	6.00
Lovett (B)	5.00
Bederwood (B)	4.00
Clyde (B)	6.00
Tenn. Prolific (B)	4.00
Wolverton (B)	4.00
Crescent (P)	4.00
Warfield (P)	5.00
Helen Davis (B)	6.00
Staples (B)	5.00
Jessie (B)	6.00

MEDIUM

Lady Thompson (B)	5.00
Glen Mary (B)	6.00
Wm. Belt (B)	6.00
Splendid (B)	5.00
Parsons' Beauty (B)	6.00
Klondike (B)	5.00
Nick Ohmer (B).....	6.00
New York (B).....	6.00

MEDIUM	Per 1,000
Jocunda (B)	\$5.00
Sharpless (B)	6.00
Ohio Boy (B)	6.00
Buster (P)	6.00
Senator Dunlap (B)	5.00
Bubach (P)	6.00
Jerome (B)	5.00
Haverland (P)	5.00
Enormous (P)	5.00
Downing's Bride (P).....	6.00
Arizona (B)	6.00
Enhance (B)	6.00
King Edward (B)	6.00

LATE

Fendall (P)	6.00
Aroma (B)	5.00
Pride of Michigan (B).....	6.00
Brandywine (B)	6.00
Gandy (B)	5.00
Dornan (B)	6.00
Marshall (B)	6.00
Sample (P)	5.00
Goodell (B)	6.00
Chesapeake (B)	6.00
Steven's Late Champion (B).....	6.00
Cardinal (P)	5.00
Commonwealth (B)	6.00
Pearl (B)	6.00
Kellogg's Prize (P).....	10.00
Joe Johnson (B)	10.00

EVER-BEARING

Americus (B)	15.00
Superb (B)	15.00
Progressive (B)	15.00
Productive (P)	15.00
Advance (B)	15.00
Forward (B)	15.00
Onward (B)	15.00

Kellogg's All-Metal One-Piece Dibble

THIS is our one-piece Dibble—no rivets to come loose or handle to break off. It is made from the very best grade of steel, with polished blade and japanned handle, which is simply a curve in the same piece from which the blade is made. It does not tire the hand and is in every way superior to any other Dibble ever put upon the market. The price of this Dibble is 35c for one or \$1.00 for three Dibbles. For setting strawberry plants and vegetables it has no equal. Dibbles are now carried by parcel post at the following rates: Zones 1 and 2, 6c for each Dibble; 3d zone, 8c; 4th zone, 11c; 5th zone, 14c; 6th zone, 17c; 7th zone, 21c; 8th zone, 24c. Carried in stock at both Canby and Twin Falls. You will find this tool most helpful.

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

Copyright 1914, by R. M. Kellogg Co., Three Rivers, Mich.

(Concluded from Page 59.)

Thus it is that Sample has become one of the most popular berries with commercial growers because of its extraordinary endurance as a shipper. Another favorable trait of the Sample is its habit of ripening a certain percentage of its fruit each day until the season is over. This combination of fine qualities has made Sample a universal favorite. This is the twenty-first year we have bred this variety. Grown only at Three Rivers.

Gandy, B. (Male)

LATE. Bisexual. Gandy was one of the varieties which was adopted by R. M. Kellogg at the beginning of his great work and was offered by him to the trade in his first list. That we are still growing this splendid variety from scions of the original stock is certainly a tribute to its high value. And when we say that Gandy grows steadily in popularity we have said about the best thing that could be said of a variety of strawberry plants. Gandy has many special qualities—it is one of the latest of all berries; it gives its largest yields in heavy clay soil; it is one of the best shippers ever originated—three points of excellence which have made it a universal favorite. Grown only at Three Rivers.

Oregon Improved, B. (Male)

LATE. Bisexual. In size, form and color very much like the Marshall, possessing all of the great features that have made Marshall one of the most popular varieties on the Pacific Coast. Many growers report the Oregon Improved (sometimes called New Oregon) as being superior even to the Marshall. We have a fine crop of this variety and cannot recommend it too highly. Grown at Canby and Twin Falls.

Pearl, B. (Male)

VERY LATE. Bisexual. Originated in Indiana this new bisexual promises to become a universal favorite. On the farm of its originator it yields large, fine fruit from ten to fifteen days after Gandy has ceased bearing. This places Pearl among the very latest of the bisexual varieties. Another of its fine characteristics is that the yield and quality hold up exceptionally well to the last picking. The berries ripen evenly over the entire surface; it has a very rich, mild sweet flavor, and the berries are very even in size. In form this variety is round. There are very few small berries. Pearl is an exceedingly vigorous grower with heavy root system and foliage entirely free from rust. It will withstand drouth as well as does Senator Dunlap. Growers who desire something especially fine and extremely late should give this variety a trial this season. Grown only at Three Rivers.

Cardinal, P. (Female)

LATE. Pistillate. This variety takes its name from its extraordinarily rich cardinal shade of color. In season it ranks among the latest of the pistillate varieties, and as its fruit begins to ripen about mid-season, the length of its fruiting period is very great. Cardinal is famous for withstanding heavy frosts at blooming time and for its large yields of high-class fruit. This is the eighth year we have had Cardinal on our farms. Grown only at Three Rivers.

Commonwealth, B. (Male)

VERY LATE. Bisexual. Commonwealth is of Massachusetts origin, and because of its extreme lateness, no less than for its very delicious fruit, it now enjoys a popularity quite equal to many of the old-time favorites. The berry is dark, rich red, coxcomb in form, and the surface of the fruit is smooth. The meat is rich and juicy. Having an unusually long fruiting season, this variety grows very large crops of distinctly fancy fruit. Those whose markets call for late berries should set liberally of Commonwealth. It is a strong pollinizer and its blooming period is of great value where late pistillates are grown. Grown only at Three Rivers.

EVER-BEARING VARIETIES

Ever-Bearing Productive, P. (Female)

PRODUCTIVE is a pistillate fall-bearing variety of great promise. It is a very heavy yielder, and

the berries are large and of splendid quality. The Productive, the same as all pistillates, should be set between flanking rows of such bisexual fall-bearing varieties as Superb or Progressive in order to be properly fertilized. The foliage of Productive is very dark green. It has long leaf-stems which serve as a protection to both fruit and blossoms. This variety, the same as Superb, gives a good crop of choice berries in the early summer and continues fruiting up until freezing. It is a good runner maker. It seems to be at home in all soils and succeeds under all climatic conditions. No grower need hesitate to set the Productive. This variety, like most fall-bearing varieties, gives berries of rounder form during the fall months than in the early summer, and it has been our experience that the fall-bearing varieties give berries of a milder flavor during the fall months than in the early summer months. Be sure and include a liberal number of these plants in your order. Productive is grown only at our farm at Three Rivers.

1,000 Kellogg Plants Produce \$100.00

Winona, Minn., July 9, 1914. The plants you shipped us last spring did finely. From 1,000 plants we sold \$100.00 worth of berries and they kept us busy all the time picking them.

John Kowalewski.

Our New Runner Cutter with Handle

THE ease and simplicity with which runners may be cut with our new device is well illustrated above. The operator easily guides the cutter so as to remove the runners as desired, as the cutter may be run as close to the plants as one may wish.

Runner-cutter with handle.....\$2.50

Runner-cutter without handle (no handle may be attached to this form of cutter, as the bolt holes are arranged for attachment to Planet Jr. cultivator), \$1.85

Planet, Jr., 12-tooth cultivator as shown.....\$ 9.00

Planet, Jr., 12-tooth cultivator with runner cutter attached 10.85

Read Carefully Every Word Upon the Inside Cover Pages

Of this book before making up your order, so that you may know our rules and terms, and thus avoid possible misunderstandings.

Our Terms

CASH must accompany each order or it will not be booked. If the amount of the order is \$5.00 or over, you may remit not less than one-third of the amount when ordering. When the amount of the order is less than \$5.00, remittances should be made in full. The balance due on any order must be paid before plants are shipped. (After March 15 all orders must be accompanied by full payment to insure prompt delivery.) We send no plants to anybody, no matter what his financial standing, until plants are paid for. We do not ship plants to anybody C. O. D. Do not ask us to do so.

How to Remit

ALL remittances should be made by postoffice or express money order, or by bank draft or registered letter. No other way by mail is safe, and we shall not be responsible for any currency or coin sent in a letter. When private checks are sent, add 10 cents to cover cost of collection. This for the reason that the clearing house associations all the country over have adopted a minimum rate of 10 cents for exchange on all personal checks, and the great volume of business done by us makes it necessary to insist upon this point.

We Employ No Agents

SCORES of complaints come to us every year to this effect: "The plants I bought of your agents are worthless." Tree peddlers secure copies of this book and represent themselves as our agents, and then deliver common stock, to the loss and disgust of purchasers. You can get the genuine Thoroughbred plants only by sending direct to us. Should anyone represent himself as our agent, offering to sell our plants, compel him to show his credentials. This will reveal his true character, as he will be unable to show authority to sell our plants.

Order Early

ALL orders are booked in the rotation in which they are received. The earlier they come in the more certain will be the patron of securing the plants of his choice. Orders for early shipment are best, too, for the reason that the plants when dormant are in better form to transport and transplant. No order will be filled for less than \$1.00, as the cost of handling is too great when the amount is less. Plants will be shipped at the proper time, as nearly as we can judge, for setting out in your locality, unless you give us specific date for shipment. Orders received after April 15 will be shipped according to date of their receipt, regardless of special shipping dates, provided they have been remitted for in full.

How to Make Up a Club Order

YOU may join with your neighbors in getting up a club, and get the benefit of thousand rates on all varieties of which 500 or more plants are ordered. But to secure these rates the club order should come in the name of one person and the entire order be shipped to one address. As each bunch of plants bears the name of the variety ordered, the division easily will be made upon arrival of the plants. In all cases, however, where the club order is to be divided and plants shipped separately to members, each member will be required to pay the regular rate quoted in our price list for the number of plants he orders. If plants are to be divided in the box the charge for plants will be the same as though each individual order was shipped separately. Catalogs will be sent to your neighbors on request, to aid in making up the club.

Transportation of Plants

EXPERIENCE has taught us that the best and safest way to ship plants is by express, wherever the customer is so situated as to have them come forward by express. An additional incentive to the use of express is the lowered express rates which lately have gone into effect. Remember, also, that express packages travel in an open car, whereas mail packages are carried in air-tight mail sacks together with heavy and bulky packages.

Estimated Weight of Plants

IT IS impossible to give the exact weight of plants, because plants of some varieties are much larger than others, and plants steadily increase in weight as the season advances. Experience shows that the average weight of 1,000 plants grown at Three Rivers, Mich., is 30 lbs. to the thousand; those grown at Twin Falls, Idaho, weigh 35 lbs. to the thousand, and those grown at Canby, Oregon, weigh 50 lbs. to the thousand.