Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

62.47
JAN 7 1910

THE NEW HORTICULTURE

1910

GREAT CROPS
OF STRAWBERRIES
AND HOW TO GROW THEM

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

Our Guarantee

WE GUARANTEE that all plants shipped to our customers are grown upon our own farms and under our methods of selection and restriction; that they are pure and true to name, and that a full count will in all cases be given. 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 the customer's order.)

We also guarantee that every package is examined by a competent inspector, and that both plants and package must be in perfect condition before allowing them to leave our hands.

Our plants are thoroughly and scientifically sprayed throughout the entire growing season, and we guarantee them to be absolutely free from all diseases and insects. Read the Michigan State Inspector's certificate.

Certificate of Nursery Inspection No. 842

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.

In short, we guarantee that every detail of the work of producing and shipping plants, so long as they remain under our control and observation, is perfectly carried out. We are exceedingly anxious that alize his highest expectation of success with our thing in our power to as-desired result. But we ourselves responsible for ceases, and, of course, it our plants are turned tion company we have them. Should they fail tion it will be due to im-less treatment while in have been growing and plants for twenty-five ces have plants failed to ideal condition; and our parts of the United Canada and to many of

With our careful plants it would seem mistake should occur in but we guarantee plants the express understand-curs, we are to be held ages beyond the amount

The fact that we same customers year af-dence of our success in the work of delivering high-grade plants in perfect condition—a fact

further emphasized by the increase, year by year, in the acreage devoted to the production of our Thoroughbred strawberry plants, which reaches 110 acres for the crop of 1911.

IN presenting this book we ask your consideration of a strain of strawberry plants grown by a concern whose purpose it is to develop a line of varieties adapted to any soil in any country. We have spent years in exhaustive experiments with many varieties, seeking for a line of the best. We do not offer any untried varieties, but the old and tried ones which we have grown under ideal conditions and which we now have built up into a strain of Thoroughbreds that have won the world's highest fruiting records. All we ask is that you read every word in this book and study our methods of producing these plants. If you do this we are confident you will be convinced that the Kellogg strain of plants is what you need to insure success as a strawberry grower.

every customer shall re-tations in the direction plants, and we do every-sist him to attain this cannot and do not hold plants after our control is understood that when over to the transporta-no further control over to arrive in good condi-proper handling or care-transit. However, we shipping strawberry years, and in few instan-reach the purchaser in plants have gone to all States, the Dominion of the countries of Europe. methods of labeling quite impossible that a the matter of varieties, to be true to label with ing that, if a mistake oc- responsible for no dam-received for plants.

receive orders from the ter year is the best evi-

—a fact

Substitution

THIS year we have an exceptionally large stock of plants which reach the high ter mark of Kellogg quality, and we confidently expect to be able to supply the w of all our customers. However, certain varieties always sell far in excess of o varieties, and this contingency must be reckoned with. When it comes time to shi our order, is it your wish, should we be sold out of any varieties that you have selected, t we substitute some other varieties of equal merit in their place? In making out your o r be very explicit on this point. Please note that at the bottom of the fourth page of the order sheet for 1910 is a blank space with dotted lines for your answer to this question. If satisfactory for us to substitute, write "Yes" on the dotted line. If not satisfactory, write "No." In the latter case 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 shall 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 sub-stitute. We make this matter so clear as to avoid delays at shipping time, and any mis-understandings. If you have second choice as to varieties, please indicate what they are; this will aid us very much and also will give you double assurance of getting desired plants.

Conserving the Forces of Heredity

RUSSELL M. KELLOGG
Founder

JUST a quarter of a century ago the R. M. Kellogg Company was founded, and the chief foundation stone upon which its substantial walls have been built was an idea—the idea that the strawberry could be improved in quality and made a greater source of profit through breeding and selection. We have heard much during the past two years of the conservation of the world's great forces, and when the historians of the future shall come to write of the epochs that have marked the world's advance, they will place among the greatest influences to that end the work that America has done in stimulating the impulse of the people to conserve and utilize to their full the wonderful gifts and powers of nature that for so long had been permitted to lie dormant or to be only indifferently appreciated and employed. But long before President Roosevelt began his campaign in behalf of this work, and long before the American Breeders'

Association was organized to assist and encourage a better understanding of the laws of heredity and the practical way to breeding of better plants and pany was busily at work along provement of the strawberry as was thus accomplished, and what result of his efforts, is matter of proud, for these achievements

This is a practical age, how-actual results. What, then, has way of proof of the efficacy of nection which ought to be sug-statement of the United States strawberries in the United States logg Thoroughbred plants have Rocky Mountains more than the Pacific Coast section, where

season extending over several months, they have produced more than 15,000 quarts to the acre, or about nine times in excess of the average. One Californian sold his crop of Kellogg strawberries grown on two acres in 1907 for nearly \$3,000, and an Oregon customer sold \$1,500 worth of strawberries from a single acre. Thousands of testimonials come voluntarily from our customers to similar effect, and the proofs of their claims come to us in the form of beautiful photographs of their fields or in the still more practical cash records of sales of strawberries.

Proof of another and quite as important a character is found in our experience on this farm with "run-out" plants—we never have known of such a thing. And it is an interesting horticultural fact that three of the most popular varieties of strawberries grown on the Kellogg farm—Warfield, Bederwood and Bubach—have been continuously bred and selected from the stock which was first brought on the farm twenty-three years ago. Not only have these old-time varieties not run out, but their increased fruiting power has grown to such an extent that they are now, year by year, beating their own records of an earlier time. The importance of the work thus being done by this company is suggested by the recent statement of Willet M. Hayes, Assistant Secretary

FRANK E. BEATTY, Pres.
America's Greatest
Strawberry Expert

conserve and utilize them in the animals, the founder of this com- these very lines, with the im- his special objective, and what is still being accomplished as a history of which we are justly have made for the world's uplift. ever, and success is measured by the Kellogg Company to offer by its work? One point in this con- gestive is found in the statistical census that the average crop of is 1,700 quarts to the acre. Kel- produced in the states east of the 10,000 quarts to the acre, and in the strawberry has a fruiting

W. H. BURKE
Secretary and Treasurer

of Agriculture, who declares that "Next to the conservation and efficiency of the physical, mental and moral energy of American youth through education which fits them for practical life, stands the problem of utilizing the forces of heredity in the improvement of all forms of life." And he proceeds with the statement that of the \$7,000,000,000 worth of agricultural products representing the annual output of the United States, "five billions come from crops and animals the heredity of which we may undertake to improve."

And it is in this very work we are engaged

and to which we invite the earnest cooperation of the thousands of men and women we are proud to name as our patrons and friends. How faithfully we have sought to assist them in this direction thousands of letters from them expressing their gratitude eloquently testify. It is our sincere desire that this silver jubilee year of the R. M. Kellogg Company shall mark great advance in this direction and that the season of 1910 shall to greater degree than ever before prove to the world the meaning and importance of conserving the forces of heredity.

Quality of Plants

WHETHER you are growing strawberries for market, or home use, or for pleasure, it is only natural that you should have the ambition to grow the very largest crops of the choicest berries possible, and in order to do this you must follow intensive methods. You must start right and stay right; in fact, this would be true in any line of business—the beginning has much to do with the ending. But if you are to win the highest degree of success in strawberry production it is absolutely necessary that you use a strain of plants that have bred in them a fruit-producing organism of sufficient power to respond to high cultural methods.

Now it is not our intention to sing the praises of the Kellogg strain of plants. We prefer to let those who have used these plants for many years pass judgment on them, and if you will read the many letters which appear in this book that have come unsolicited from customers in all parts of the country, we are quite sure you will be convinced that these plants are what you need to insure the success that you so much covet. If you will observe Page 3 and note the photo-engraving at the top of the page and observe the character of the mother plants which

produce the Kellogg strain of plants, we do not believe it would require any further argument to convince you that the Kellogg strain of Thoroughbreds is all that we claim for them. You also will note the photo-en-

gravings of the beautiful fields and home gardens of strawberries which have been grown from these plants. For twenty-five years the Kellogg Company have been putting forth their energies and concentrating their thought upon the work of developing quality in strawberry plants, and thus we have built up a strain of plants which have won the world's highest fruiting record and the complete confidence of strawberry growers all over the world.

The fact that we sell from fifteen to twenty million plants each season and that a large percentage of them goes to customers who have used the Kellogg strain of plants for many years, some of them since this institution was established, should

be sufficient evidence to convince anyone that the Kellogg strain of plants are the cheapest plants in all the world. Our propagating bed consists of 110 acres. The plants are grown upon soil that is ideal for the development of the best quality. It is prepared one year in

A KELLOGG MOTHER PLANT

TO assure you that the Kellogg plants will develop into large size and produce a large number of crowns after they have been shipped and grown in other soil, we show here a photo-engraving of a Kellogg mother plant which was grown in Arkansas and sent to us after it had been set one year. This plant has seven crowns, and is capable of producing at least two quarts of berries. The Kellogg plants carry with them great productiveness wherever they go.

KELLOGG MOTHER PLANTS

THESE are the kind of mother plants which produce the runner plants that you get when you purchase plants from the Kellogg Company. Note the large number of crowns developed by each one of these mother plants, also the immense root system. These are photographs of mother plants taken from our propagating field. You will note that the leaves of some are wilted a trifle, which was done while taking them from the farm to the photographer's gallery. This one illustration alone should convince the most skeptical that the Kellogg strain of plants must have great fruiting power.

advance by being so filled with humus and plant-food that the plants do not suffer for a single moment for the want either of moisture or food. From the time the plants are set until they are dug and shipped to the customer they receive the very closest attention. During the growing season they are cultivated from twenty-five to thirty times and hoed from twelve to fifteen times; they receive from eight to ten thorough sprayings each season, using Bordeaux mixture and arsenates. The Bordeaux mixture is to prevent any fungous spores, and the arsenates are to keep away or destroy any leaf-eating or chewing insects.

We mention this so that you may be assured when you purchase plants of the Kellogg Company that you are receiving plants which are absolutely free from anything that would be detrimental to them. Each variety is grown in a bed to itself, and is handled in such a manner as to preclude any possible danger of a mix-up. Our plants are as pure as it is possible to have them. Therefore, when you order a certain variety of the Kellogg plants you are sure to get that variety, true to name. There is nothing more disappointing to a fruit-grower than to order a certain variety and then, after it comes into bearing, to find that he has not received what he ordered and paid for; and although the nurseryman may be willing to return his

money or replace the plants, this does not begin to reimburse him for the loss he has suffered.

We might also state that our plants are thoroughly mulched to protect them from freezing during the winter. This mulch is applied at the first freeze in the fall, generally about the last of November. The covering consists of straw, and this material is applied over the entire 110 acres to a depth of about three inches, which shades the ground during the winter days when the sun shines brightly. This prevents the ground from thawing suddenly. Plants that are not cared for in this manner always are weakened by alternate freezing and thawing. The crowns of unprotected plants are often injured and the roots are weakened. Sometimes the thawing will be so sudden that the plants which are not mulched will be raised out of the ground an inch or more, and in doing this the roots will be strained and sometimes even broken from the crown. The mulch that we apply not only prevents this sudden freezing and thawing of the soil, but it also holds the plant dormant in the spring until we dig and ship them. A plant that has been protected in this manner will carry through the winter in ideal condition, and it will start off in the spring with great vigor and strength; the roots will be calloused and all of the vitality of the plant which has been

VIEW OF OFFICE OF R. M. KELLOGG COMPANY

The great packing house and implement building appear in the background.

stored up in the body of the plant during the previous growing season is carried with it to its new home. This has much to do with its immediately starting into vigorous growth, while a plant that has been injured by sudden freezing and thawing has been greatly weakened, and will start very slowly when reset, many times failing to start growth at all.

We deem it unnecessary to say more about the great value of using plants of high quality, and pass to the preparation of the soil.

Proper Fitting of the Soil

NEXT in importance to the quality of the plants is the proper feeding of the soil in which the plants are to be set. In fact, it would not matter how good the plants might be if they were set in a poorly prepared soil and given half-hearted cultural methods—the crop of berries would not come up to your expectations; neither would the quality of the berries be what you would expect. Even Kellogg's Thoroughbred strain of plants will not thrive under neglect. We will not deceive anyone. If we win you as a customer it shall be done on fair-and-square grounds; and if we thought it was your intention to follow slipshod methods we should

prefer that you get your plants somewhere else, because we feel that it would injure our reputation to have some of our plants in the hands of a careless grower. It is the height of our ambition to make our cultural methods so plain that even the novice may succeed from the very beginning. Leading fruit growers and professors of horticulture of this country, as well as of Canada, have been kind enough to say that our methods were the most practical of any intensive cultural systems that ever have been put into print; and if you will adopt these methods and be faithful to them from the time you set the plants until you market the berries, there is no reason why you should not be just as successful as we have been, or as our many customers report they have been.

IN giving you the instructions for feeding the soil we shall merely outline in concise form the plan used upon this farm. During the fall and winter months a good dressing of stable manure (about twelve to fifteen two-horse loads per acre) should be evenly applied over the entire surface of the ground which you intend to prepare for strawberry plants. We use manure spreaders—have four of them—

**Fertilizing
the Soil**

SEVERAL BUNCHES OF KELLOGG'S THOROUGHBREDS

WE show this photo-engraving to represent the difference in the size of bunches of the several varieties. Glen Mary makes a large plant; therefore, a bunch of twenty-five plants is much larger than that of Senator Dunlap. Warfield is a trifle smaller than Senator Dunlap and not quite so long. Sample is almost as large as Glen Mary but somewhat shorter. However, the size of the plants denotes no great difference in their value or fruiting power; plants, regardless of size, which come from a line of mother plants that have a known fruiting record and have been properly propagated are the kind which are capable of producing large quantities of choice berries. Note engraving above and on Pages 2 and 3 and see the character of the Kellogg mother plants which produced this Kellogg strain of thoroughbred plants.

and we find it one of the best investments we ever made, but we realize that all growers have not sufficient land to justify the purchase of one of these machines. However, if you can rent one it will pay you to do it. If you cannot, then scatter the manure from the wagon as you haul it just as evenly as you possibly can. It will even pay you to have someone follow after the wagon and rescatter the bunches. It pays to have the manure so evenly distributed that every inch of the ground has its portion. This manure should lie on the ground throughout the winter, and the rains and melting snow will leach the juices from the manure, which will be taken up by the soil. The manure will also act as a mulch, preventing sudden thawing during the warm days in the winter and preventing also a waste of plant food during windy weather; and in the spring, when the general thaw comes, instead of the ground starting to thaw from the top, it will dissolve from the heat brought up from under the surface. This will prevent the soil from settling and running together, and in

the spring the soil will be as mellow as an ash heap.

IN the spring, just as soon as the soil will crumble, the manure should be plowed under. After the plowing, a disc or Acme harrow should be used thoroughly to incorporate the manure with the soil. The vegetable matter of the manure should be thoroughly distributed through the soil so that little particles of it may come in contact with a large portion of the soil grains. This will make the soil spongy and light, capable of holding large quantities of water and giving off the moisture as the plants need it. It also makes it possible to hold the soil at a more even temperature, which is absolutely necessary to keep the bacterial germs working as they should in order to prepare plant food into digestible form for the plants. Humus also increases the number and activity of bacterial germs.

We have experimented with manures of different kinds; that from the sheep pen,

Plowing
Manure Under

KELLOGG'S EXPERIMENTAL BED

HERE is where we test all of the varieties from which we are propagating, and it is from this experimental plot we get our records used in writing the descriptions of the different varieties. By this method we can give a definite account of the behavior of each variety, both in plant and fruit production, as well as the quality of the berries. The time of ripening and the date of last picking also is noted. From the time that plants start blooming until the berries are all picked, this experimental plot is watched with much interest.

cattle sheds, horse stables and chicken yards, and they are all good when properly applied; but, like everything else, you can use too much of it, and you would better not use any than to apply a big forkfull in one place and none in another, and turn under large clumps of strawy manure.

Preparing the Home Garden

THIS book would not be complete without instructions for preparing and managing the home garden or small patch which is intended for strawberries, because those who may have a very small plot would not be justified in using the heavy farm implements that we have recommended for preparing a large field. The first thing to do preparatory to setting the small patch is to select the piece of ground which you intend to use for this purpose. Then in the winter or early spring months scatter over it some kind of manure. It does not matter whether it is from the chicken pens, cow or horse stables, just so it is well decayed and scattered over the ground evenly. If chicken droppings are used they should be scattered very lightly.

The manure should lie on the ground during the winter and in the spring spade it under,

KELLOGG'S THOROUGHBREDS IN NEW JERSEY

THIS beautiful back-yard scene is that of the home of O. B. Kelsey of Blackwood, N. J., and illustrates what may be done with a little spare ground. Mr. Kelsey apologizes for the photograph and says it is his first attempt, but all will join us in saying no apologies are necessary, as the photograph is indeed a fine one and shows also the care Mr. Kelsey gives his plants. The plants shown are Marshall, Sample and Climax.

working the soil up finely with a garden rake, thoroughly incorporating the manure with

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

WOMEN AND STRAWBERRIES

IN this garden, everything in the way of berries and vegetables are grown to perfection, all kinds of bush fruits, and grapes. There is a row of strawberries in each row of grapes but the posts hide the view of the plants. You will note that Glen Mary is set in a row between Pride of Michigan and Wm. Belt. This is for the purpose of properly mating Glen Mary which is not sufficiently strong in pollen to give best results when set alone. You can have a garden just as nice as this one by using the Kellogg strain of plants and following their methods as these folks have done.

the soil. In a small patch like this it is hardly necessary to roll it unless you have a small hand roller.

WHERE the ground is limited the rows may be made as close as two feet apart and the plants set one foot apart in the rows; or you may make the rows fifteen inches apart and set the plants one foot apart in the rows and every fifth row leave a two-foot space. This leaves your plants in small beds of five rows each with a two-foot path between the beds to walk in when picking the fruit.

If you have your rows two feet apart and the plants set one foot apart in the row you may allow each plant to make sufficient runners to form either the single-hedge or double-hedge row. Either of these systems will give you a choice lot of berries, but if you make the rows fifteen inches apart and have five rows in each bed, it is then best to cut off all runners and grow the plants in the hill system.

A small garden should be mulched the same as a large field and should be hoed and looked

after in the best possible manner. A beautiful bed of strawberry plants in the home garden is a thing of beauty as well as a great help in providing the table with good things.

The Use of Commercial Fertilizers

PERHAPS you will say that it is impossible for you to get enough stable manure of any kind to cover the ground you purpose setting to plants. In a case of this kind, we would suggest commercial fertilizer. In using commercial fertilizer, we would recommend a brand analyzing about as follows:

Nitrogen,	-	-	3 per cent.
Potassium,	-	-	9 per cent.
Phosphorus,	-	-	7 per cent.

The amount you should apply per acre will be determined largely by the character of your soil. If it is rather thin, we should use about six hundred pounds per acre; if your soil will produce a fair crop of corn or potatoes, then about five hundred pounds per acre will be sufficient.

The commercial fertilizer should be drilled over the ground after the latter has been plowed and harrowed once. Then it should

THOROUGHBREDS GROWING IN NORTHERN ILLINOIS

ALFRED TAYLOR of Thomson, Ill., in enclosing the photograph which we reproduce above, says: "This patch is from plants bought of the R. M. Kellogg Company and the varieties shown are August Luther, Senator Dunlap and Dornan. The plants are set in rows three and one-half feet apart and the runners had been cut back until July or August. The photograph was taken in September."

be worked thoroughly into the soil before setting the plants. If possible, the fertilizer should be worked into the soil at least two weeks before the plants are set. This gives time for the moisture in the soil to remove some of the heating qualities from the fertilizer which, if it came in contact with the roots of the plants while at full strength, might cause some injury. In fact, any kind of fertilizer, whether barnyard manure or commercial, should be worked into the soil just as long before the plants are set as possible, and the more thoroughly any kind of fertilizer is worked into the soil the better will be the results.

What Kind of Soil Is Best?

WHEN you understand that the soil is merely a dish from which plants feed, you will then not lay so much stress upon the character of the soil itself. More depends upon the way soil is prepared than it does upon the kind of soil; however, soil should be treated according to the character of the soil in which you are working. For instance, a stiff clay soil will require more humus matter than a loose sandy soil, and in preparing clay soil we must not press it down too firmly in preparing for

the plants; roll just enough to break up the clods, if there be any, and to level the surface, and if the soil be very stiff and heavy we would suggest that you harrow just as fast as the ground is broken up. By doing this the clods will be mellow and will crumble to pieces so that no rolling will be necessary.

HEAVY black soil may be prepared in about the same manner as the clay soil, with the exception of the manure. As a rule, black soil is very rich in nitrogen and will give better results with a very light dressing of manure than it will with a heavy dressing. About fifty bushels of wood ashes scattered over the surface of either clay or stiff black soil will greatly improve its texture as well as its chemical condition. The lime in the ashes will assist in breaking up the stiffness of the soil and in holding it more loosely than would be possible without the use of lime.

IN preparing sandy soil it should be plowed quite deeply and pressed down very firmly. We suggest this because the particles of sand, unless they are pressed down very firmly, will admit an over-supply of air into the soil, which will dry it out quickly and also will cause the bacterial germs

Black
Soil

Clay
Soil

Sandy
Soil

A FANCY DISH OF GLEN MARYS

THE demand for the Kellogg strain of Glen Mary plants has grown to such magnitude that it is almost impossible for us to produce them in sufficient numbers to fill the orders. This year we have set the largest acreage of this variety ever grown on our farms and those who send their orders in early may be sure of getting as many of our Glen Mary plants as they wish.

STRAWBERRIES WITH VEGETABLES AND FLOWERS

WM. WHELCHER of Covington, Ind., a famous grower of flowers and vegetables, is making a great success with strawberries. Rows are placed about three and a half feet apart, with a row of flowers or some small vegetable growing between each two rows of strawberries. We have seen this patch and it is certainly a beauty as well as a source of large profit. This indicates how a small plot of ground may be utilized without having waste space.

to work up the manure so that it will lose the best results from the humus or decomposed vegetable matter.

SANDY loam may be prepared about the same as the sandy soil, only do not roll quite so firmly. Clay loam should be pressed just enough to break the clods, and should always be a little more dry before working than sandy soil. We think what we have said about the different soils will show you that there is no particular difference, but that judgment must be used in preparing any soil; that you understand the kind of soil you are working in and prepare it properly. Believing that you are now pretty well posted on the fitting of the soil, we pass on to the preparation of the soil for plant setting.

Preparing Soil For Plant Setting

AFTER you have your soil well fitted in the way of harrowing and fertilizing, you will begin to prepare it for the plants. We already have said that sandy soil should be rolled firmly, that sand loam and clay loam should be rolled lightly, and that stiff clay and black soil should not be rolled at all if it is possible to get it into shape without doing so; but no matter what kind of soil you have, it should be perfectly levelled before

starting to make marks for the rows. When we say level, we do not mean without hills, but what we do mean is a smooth surface so that the marks for the rows will be easily followed.

THE marking device should consist of something that will make a very light indentation in the soil. We have used both the sled-runner and wheel device, and one is just as good as the other. The sled-runner marker is made by nailing 2x4 runners on two boards; the runners

Marking
Devices

SIX-WHEEL MARKING DEVICE

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

A RHODE ISLAND FIELD OF THOROUGHBREDS

WRITING under date of February 23, 1909, Wm. J. Baker, of Carolina, R. I. says: "I am sending you under separate cover by this mail a photo of my strawberry patch. Plants were bought of you in the spring of 1908, photo taken 105 days after setting. No need to write a long story, the picture (and an order for more plants) speaks for itself. While your price is a little high this trip, still I would rather pay \$10 per thousand for your plants than \$3 for some others I have seen."

should be about two feet long; the length of the boards on which the runners are to be

enough longer to indicate the desired spaces.

The engravings of these devices shown here make the matter so plain that you may easily make either of them. The rows should be just as straight as you can possibly make them, as it will add greatly to the appearance of the field of growing plants; and it always pays to take care of the beauty side of strawberry culture.

Setting the Plants

BEFORE setting the plants, the roots of each plant should be cut back about one-third. The best way to do this is to take a bunch containing twenty or twenty-five plants in the left hand and with a pair of shears cut off the ends of the roots. By following this plan the work of pruning is done very quickly. The foliage also should be trimmed off, leaving only the crown-leaf. The reason we suggest the pruning of the roots is because wherever the root is cut it will callous and

SLED-RUNNER MARKING DEVICE

spiked will depend entirely upon the width you intend to have your rows. For instance, if you intend to make your rows three feet apart, then the boards should be six feet long, and by spiking a runner on each end of the board and one directly in the middle, you see, would make the rows exactly three feet apart, and the device would mark three rows at a time. If the rows are to be three and one-half or four feet apart, the boards should be

Pruned for Setting

GREAT CROPS OF STRAWBERRIES AND HOW TO GROW THEM

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

KELLOGG'S STRAIN OF HAVERLANDS--REDUCED TO HALF-SIZE

DURING the twenty years the Kellogg Company have been breeding and selecting the Haverland it has continued to improve both in productiveness and quality of fruit. We do not hesitate to say that the Kellogg strain of this variety surpasses in the number of quarts per acre any other variety of its season. It requires more than a million plants to supply the demand for our Haverlands, and the demand comes from every part of the United States and the Dominion of Canada.

send out a large number of feeding roots, which will soon take hold of the soil and start the plant to growing.

IN setting plants we never have found any tool which equalled the dibble. We show a cut of this tool on Page 64, which will explain it better than anything that we might say. Take the dibble in the right hand and thrust it into the soil about six inches deep, then press from you; this will make a wedge-shape opening about four inches wide at the top, tapering down to a point at the bottom. When placing the plant into this opening give it a quick motion which will naturally spread the roots out fan-shaped. Then remove the dibble from the hole and place it into the soil about two inches from the opening, and then drawing the dibble toward you will bring the earth up against the roots of the plants. This closes the opening from bottom to top. A light pressure with the hands around the crown of the plant and—the plant is securely set. Be sure and have the crown or body of the plant on a level with the surface of

the ground, and also that the roots of every plant are spread out and that they extend straight down into the opening. Also be sure that the opening is filled back with soil and that it is pressed from bottom to top.

As evidence that our method of setting plants is a good one, we will say that after

Tools Used
for Setting

METAL PLANT BASKET USED WHEN SETTING

NOTE the covering over one end of the basket, which protects the plants from hot sun and wind. The hood end always should be kept towards the sun.

setting one hundred and ten acres of plants last spring, we do not believe we lost one per

PROPER MATING OF VARIETIES

THIS illustration represents our method of mating the pistillate varieties. The row of bloom on the left is of an extra-early bisexual. The three rows in the center represent an early pistillate. The row to the right is a mid-season bisexual. You will note that the flowers in the row to the left are all open. At this stage the anthers ripen and burst, from which comes the pollen that insures perfect berries with the pistillates. The pollen from this first row will furnish pollen to properly mate the bloom of the pistillates which are equally developed. The row of bisexual flowers to the right are just opening, and they will be fully matured at the time the pistillate flowers which are just opening will be ready to receive the pollen. Thus you will see why we advocate setting a pistillate in rows between two bisexuals, one a little earlier and the other a little later, and we feel confident that this illustration will make our method so plain that you will fully understand it.

cent. of them; in fact, we doubt if there is a vacant place in the entire one hundred and ten acres.

The Proper Mating of Plants

THE greatest disappointment that the strawberry grower suffers arises from the fact that varieties of plants he has secured from ignorant or careless nurserymen are not properly mated. This is bound to result in the production of small, knotty, ill-formed and ill-flavored fruit. It always has been the Kellogg Company's rule to examine each order that comes for plants, and if the customer has not ordered varieties that will mate well together, we write calling attention to the fact that a proper selection has not been made and make suggestions as to varieties they should have in order to insure proper pollenization; and in doing this we almost invariably find that the customer does not understand that different varieties of strawberry plants were respectively male and female and must be mated if success is to be had. Through a series of experiments

we have found that pistillates are entirely too valuable to discard, and when they are properly mated they will as a rule produce more berries of better quality than bisexuals. In mating, the pistillate should be set in rows between two bisexual varieties of different seasons, one a little earlier and the other a trifle later than the pistillate. As soon as the pistillate flower opens, the pistils become receptive, and as soon as the bisexual flower is opened fully the anthers mature and burst, thus furnishing plenty of pollen grains to be carried by the wind or winged insects to the pistillate flower. Should one of these flowers open in advance of the other, you will readily see that the result would not be satisfactory.

This verifies our method of mating as being the only correct one. Experiments have proved that plants must be strong in their fruit-producing organism and that they must be free from every taint of weakness caused either by pollen exhaustion or seed production if they are to produce flowers with largely developed anthers, full of rich pollen grains. This is a claim we make for the Kellogg strain of plants: they surpass all others in

KELLOGG'S THOROUGHBREDS IN THE GREEN MOUNTAIN STATE

WRITING under date of June 19, 1909, and enclosing the photograph which we have made into the half-tone above, G. M. Farnsworth of North Bennington, Vt. writes as follows: "I am very much pleased with the Pride of Michigan and Bubach which I am growing with Michel's Early. Bubach has been thoroughly pollenized by this combination and all the plants are loaded with nice big fruit; never saw late varieties so full of fruit as Pride of Michigan. Bubach is living up to its old reputation. Have set out five acres of plants propagated from those which I got of you in 1908. Let me say for the Pride of Michigan that I never saw such beautiful plants in my life for vigor. It makes just runners enough and I now have some young plants with crowns in four parts." Mr. Farnsworth's straw hat indicates the height of his plants.

this respect, as well as in their fruit-producing power, and customers who have tested them beside other plants verify our claims.

YEARS of experience has convinced us that even bisexuals will do better when set with other bisexuals than they will when set alone. We discovered this several years ago by experimenting with a large number of different bisexuals set in rows side by side. Twenty-five plants of each variety were used. We took some of the same bisexual varieties and set them in large blocks by themselves. At fruiting time, the different bisexuals which were mated with other bisexuals showed a large gain over the same varieties which were set alone and which had to depend upon pollen from their own flowers. While this is one of our discoveries, it since has been tested by experiment stations and professors of horticulture have found our claims to be correct; and inasmuch as this is now a settled

fact we suggest that all our customers adopt this plan of mating; that is, to grow the pistillates in rows between two bisexuals of different seasons, and, if it is your purpose to grow all bisexuals, to set them in rows so that you will have about three rows of each variety alternately.

Cultivating Strawberry Plants

THERE is no department of the work requiring more careful attention and thought than cultivation. Often growers will fail at this point. We shall describe the methods of cultivation employed on our farms and if you could see our one hundred and ten acres of plants during the growing season, we are sure that you would require no further proof of the necessity and value of thoroughness in this department.

Just as soon as the men start setting the plants we have one or two men follow them with twelve-tooth Planet Jr. cultivators, go-

Mating
Bisexuals

HOW WE KEEP VARIETIES TRUE TO NAME

THIS photo-engraving shows us taking the mother plants from the breeding bed for further breeding and propagating. The foliage is so large that the division between the plants taken from different mother plants is hardly visible. You will note to the right the mulching lies in winrows which has been raked off of the rows we are digging, and on the stakes you will note the number representing the mother plant which produced these plants. You will also note the men in the rear pruning the plants before they go into the crates. This crate represents our method of carrying plants from the breeding bed to the propagating bed. The tag on the crate bears the name of the variety, and you will note the lid shades the plants from the sun. Our method of growing the plants, digging and transferring them to the propagating bed precludes any possible danger of getting varieties mixed. We would not be afraid to offer to pay anyone's expenses to this farm from any part of the United States or Canada and allow him \$10.00 a day for his time if he can find a single stray plant mixed in with any variety. Every variety is absolutely pure and true to name.

ing just as close to the plants as they can without throwing dirt over the crowns. This breaks up the footprints made by the setting men and forms a complete dust mulch all around the plants, which holds the moisture in reserve in case a drought should occur. Our ground is laid off in blocks of about fifteen to twenty acres, and by the time one of these blocks is all set, the cultivating gang is right up to the heels of the setting men. Then the cultivators are run through in the transverse direction so that all the soil will be cut over the entire surface except the small space where the plant itself is set, and when the setting is all completed the men who do the setting go over the plants with a sharp-pointed hoe and loosen the soil right up against the plants, not going deep, of course—just enough to make a dust mulch and to kill any weed seed that might be ger-

minating there. This process of cultivation is repeated after each rain just as soon as the soil is in condition, but we never cultivate while the soil is wet.

TREAT every rain as though it was the last one you expected to get during the season, and if you will cultivate just as soon as the soil is in condition after each rain it will form a dust mulch and close up the air spaces in the top of the soil in such a manner that it will prevent any escape of moisture by capillary attraction. Instead of the moisture getting away by being evaporated by the sun and wind, it will work up to the dust mulch and be held there and used as the plants need it. To prevent any waste of moisture during an extended drought you should cultivate every seven or eight days. This intensive cultiva-

Maintaining a
Dust Mulch

A HILL OF KELLOGG'S THOROUGHBREDS IN FULL FRUIT

MOST of the foliage has been removed to show berries. This photo-engraving illustrates in a way something of the great productive power of the Kellogg strain of plants. Note how the berries lie on the mulching and the large vigorous foliage which, naturally, will develop to full size the big red berries.

tion should be continued until quite late in the fall, depending upon the season, of course. After the last cultivation, a furrow should be made directly in the center of the space between the rows to take up the water from heavy melting snows and heavy rains during the winter. Sometimes it happens that you will get a very heavy snow, and this will go off with a heavy rain, resulting in a flood of water. The water naturally will run into these furrows and drain away from the crowns of the plants, and should a freeze come at this time the water will not lie over the plants and be frozen, which would be very detrimental to them. This furrow need not be more than four or five inches deep.

Removing the Blossoms

IN two or three weeks after the plants have been set the fruit buds will begin to appear and blossoms will open. At this time you should go over the field and pinch out the fruit stems from each plant. This is a very small job, yet there is no other one thing you can do that will contribute more to the strength of the plant. One man will remove the bloom from two or three acres in one day. If the flowers were left on the plant the

latter would thereby be greatly weakened through pollen exhaustion. Especially is this true with bisexuals, and when the plant would

ABOUT two weeks after plants are set, you should relieve them of the fruit buds. The dotted lines shown on the above engraving indicates where the fruit stem should be severed from the plant. This throws more strength to the young plant, which encourages a rapid, vigorous growth.

come to produce berries the strain of seed production would in many cases so weaken the plant that it would die. It would be just as unreasonable to expect plants to yield a big crop of berries before they become established in the soil as it would to expect a newly born babe to walk. A newly set strawberry plant does not start making a vigorous growth until after the bloom has been removed, and

HEELING-IN STRAWBERRY PLANTS

Place bunches of plants against one side of the furrow or trench from six to eight inches apart, according to the size of the bunches. See that the crowns of the plants are even with the top of the furrow or surface, as shown in upper illustration, and let the lower end of the roots go down to the bottom of the furrow. When all of the bunches of one variety are thus placed in the trench, take a knife and cut the string which binds the bunch and spread out the plants as shown in the middle picture. You will note that the crowns of the plants remain at the surface of the soil the same as before the bunches were opened. The lower cut illustrates how the plants will look after the soil from opposite side of furrow is pulled in and pressed against the plants, which will hold the plants in ideal condition for weeks or until you are ready to set them. Heeling-in the plants in this way renders it not only safe but desirable to have plants delivered early and while they are still dormant. Then the customer is in position to take advantage of just the right conditions for setting his plants—in short, he is in full control of the situation, under these circumstances, and this will go far to insure him complete success in his work as a strawberry grower.

AN ACRE OF THOROUGHBREDS THAT YIELDED \$1677.88

HERE is a field of Kellogg Brandywine plants covering two and one-half acres, the property of J. W. Roe of San Gabriel, Cal. Referring to the photograph, Mr. Roe writes us under date of March 18, 1909 as follows: "From one acre of this field I sold \$1677.88 worth of berries in one season (they bore for about six months). Of this amount \$1155.00 was net."

just as soon as this is done you can almost see the plant grow. In doing the work, take a common pocket knife or shears and cut off the fruit stems. We use the thumb nail and pinch them off—that is the quickest and easiest way—and with the fingers you can reach right down into the crown of the plant and pinch off the bud without injuring the heart-leaf. This work is of highest importance.

Spraying the Plants

FORTUNATELY, strawberry plants are not attacked by many enemies. Especially is this true if you are careful to set plants that have come from a propagating bed which has been thoroughly sprayed and where the proper system of rotation has been followed. Many of the insects which prey upon strawberry plants are carried from the nurseries to your farm. The assurance you have against any insects and fungi when you buy plants of the Kellogg Company is certainly worth many times more than the small difference we charge per thousand plants over the price of the common plants. We have already said that our plants are sprayed from eight to ten times during the season. This is not because we are troubled with any insects or fungi; but it is because we are afraid we might be attacked if we neglect to spray, and

we feel that it is better to spray in advance and keep away these intruders rather than to wait until they attack us and then start fighting them. We also feel that when a customer sends us an order that he is placing his confidence in us, and we insist upon giving him plants as pure as it is possible to have them.

THE first thing that attacks strawberry plants in the spring is the saw-fly. We do not know why it is called by this name, because it is a little grayish worm, of a sort of milkish color. It rolls up like a snail on the under side of the leaves and chews up the leaf; it is a very hearty feeder and is easily destroyed by one spraying of either Paris green or arsenate of lead. It does not last long and seldom does any injury to speak of.

IN the States north of the Ohio river the first brood of the leaf-roller hatches from June 1 to 10. This too is a small worm, which is hatched from the eggs laid by a brownish moth. The little rollers weave webs in the leaves and fold them together. The second brood hatches the latter part of July or first of August. For either the saw-fly or leaf-roller the best preventive is to mow off the foliage after the

The
Saw-Fly

The
Leaf-Roller

STEVENS' LATE CHAMPION IN INDIANA

THE above illustration is from a photograph sent us by Will F. Sanders of Rochester, Indiana. He grows strawberries for market on an extensive scale. Mr. Sanders writes that practically all the plants he grows are propagated from our Thor-oughbreds and although the above picture illustrates a block of Stevens' Late Champion only, he employs Dunlap, Warfield, Haverland, Bubach, Dornan, Gandy, Aroma, Sample and others of our plants. Mr. Sanders' field illustrates the extraordinary possibilities of commercial strawberry growing where the grower knows his business from A to Z.

fruit is picked and burn over the bed. Spraying with arsenate of lead just at the time the roller or saw-fly begin to hatch will prevent either from doing any great injury. If you have a small patch, just go over the plants and kill the roller by pressing the folded leaf between the finger and thumb. This will keep the rollers from pupating, and also will keep them from folding other leaves.

THERE are several different families of beetles; most of them are hard-shelled insects, very small bugs, and their larvæ are small and look like grubs. The beetles work upon the foliage, while their larvæ feed from the roots of the plants. Spraying with arsenate of lead will destroy the beetles, and this in turn will dispose of their larvæ. A safe preventive is the burning over the plants after the fruit is picked; another is the rotating of crops.

THE white grub is a large, whitish insect with a yellow head, about one inch long. It works upon the roots of the plants and sometimes causes quite a little damage. They are hard to get at on account of their underground habit. They are hatched from eggs laid by the May beetle or June bug. These eggs gen-

erally are deposited in weedy fence corners and in old manure piles. Sometimes the grub is carried to the farm by spreading manure which has lain in piles for a year or more. If this manure was spread in the winter during the freezing weather, there would be no danger of carrying the grubs because they would be destroyed by freezing. Late fall plowing is a good preventive against the grub. Avoid using old timothy-sod ground for plants.

ANTS about the strawberry patch are the almost unailing indication of the presence of aphs or root lice. These lice are sucking insects; they have sharp beaks which sink deeply into the roots of the plants from which they suck the juices. The lice cannot travel from the roots of one plant to another, so the ants carry them, and for pay the latter secure the sweet honey-like substance which comes from the lice. If you will follow intensive cultural methods, the repeated cultivations and hoeings will discourage the ants and they will seek other quarters; and when the ants are gone the lice soon disappear. (See Page 42.)

LEAF-SPOT is sometimes called rust, it is a fungous growth which spreads by spores. These spores are very sensitive to copper;

The
Beetle

Black
Ants

The
White Grub

THOROUGHBREDS AFTER A DESTRUCTIVE HAIL STORM

THE above illustration shows the strawberry patch of Alvah F. Rogers, Postmaster at Farmersburg, Iowa. Mr. Rogers writes as follows: "This patch occupies one town lot. Was set out in April 1907. Hail nearly destroyed the entire crop just before fruiting time in June 1908. This view was taken Sept. 18, 1908." This suggests the extraordinary vitality of our Thoroughbreds.

therefore, if you will spray with Bordeaux mixture at the very first appearance of any leaf spot the Bordeaux mixture will be coated over the leaves and when a spore lights upon a leaf it will immediately perish. If there is no Bordeaux mixture on the leaf the spore will spread and eat into the tissue of the leaf, destroying the digestive organs and interfering with the growth of the plant.

WE suppose it is called mildew because, if you were to examine the leaf affected with a magnifying glass you would note a delicate web woven over the tissue of the leaf. This has a tendency to curl the leaf and cause it to appear as though it was affected by drought. This too is a fungus but, as a rule, seldom does any great injury. Bordeaux mixture will control this if the spraying is done in time.

BORDEAUX MIXTURE is a preventive against all fungi, and is made as follows: Put four pounds of blue vitriol into a coarsely woven sack—an ordinary coffee sack or potato bag; place twenty gallons of water in a barrel and hang the sack on the edge of the barrel so

that the bottom of the bag will rest on top of the water. This will allow the air to come in contact with the vitriol, which will dissolve it quickly and it will completely saturate the water. Now take four pounds of lump lime, place it in a wooden vessel, pour over it enough hot water to cover the lime—about two gallons. When the lime begins to slake, stir to prevent burning. When thoroughly slaked, pour into a barrel which contains enough water to make twenty gallons of the lime solution in all. When this is cool stir thoroughly and also stir the blue vitriol solution thoroughly and then combine the two together and mix by vigorous stirring before putting it into the spray tank.

THERE are two effective materials used to destroy the insect and worm pests above described—arsenate of lead and Paris green.

Here is the formula for arsenate of lead: Put three pounds of arsenate of lead in a two or three-gallon bucket; pour over just enough hot water to cover. Then take an ordinary potato masher and pulverize the lead until you have it beaten into a creamy paste, adding more water until you have a creamy solution. This is sufficient for from forty to fifty gallons of water.

Leaf
Spot

Mildew or
Leaf-Curl

Arsenate
of Lead

Bordeaux
Mixture

ROYALTY ADMIRES KELLOGG'S THOROUGHBREDS

ONE of our European customers is R. Strimpl of Netovice, Bohemia, who in sending us the fine photograph we have reproduced here says: "It is remarkable, after last year's hailstorms to show you such success," and then refers to a visit from the future emperor and empress of Austria as follows: "Our ambition was crowned by a very high visit. June 17 his royal highness, the throne successor, Franz Ferdinand, with his wife, looked all over our farm and both admired the scene of beautiful strawberries growing in fields, a sight not common here, as I am the first to grow strawberries in fields."

To spray with Bordeaux mixture and arsenate of lead at the same time, simply combine the lead with the Bordeaux mixture. This is done only when plants are troubled with both fungous diseases and leaf-chewing insects.

SHOULD you have but little spraying to do and be unable to get arsenate of lead in

Paris
Green

small quantities as desired, we would recommend the use of Paris green.

Take eight or ten ounces of Paris green and pour over this just enough water to paste, and after you have it thoroughly pasted add to this two gallons of lime water and mix thoroughly. This should be added to forty gallons of water. The lime water is made by slaking two pounds of lump lime in two gallons of water.

We have thousands of customers who have used our plants for years and have never sprayed, and they always get a big crop of the very choicest of berries. We are giving these spraying receipts and instructions for

those who find it necessary to spray, and even if you never have had to spray at all it will be a good thing to know how the work is done, for it may be that insects or disease may, without warning, appear.

LAYERING RUNNERS

BY laying a stone or drawing soil with a hoe over the runner-cord just back of where the young plant is forming, you will encourage the young plant to take root quickly; will also encourage a heavier rooting system, which always means more and higher-quality fruit.

The Hill
System

sirable, provided your soil is rich, but it does not pay to grow strawberries in hills on thin, poor soil. The rows may be anywhere from twenty-four to thirty inches apart and the plants set twelve to fifteen inches apart in the rows. Some growers advocate growing strawberries in hills in the following manner: Set four or five rows sixteen inches apart, then leave a path twenty-four inches wide; following this, five more rows sixteen inches apart. The plants are set twelve inches apart in the rows. The twenty-four inch space is used for the pickers to walk

Systems of Planting

THERE are different systems of growing strawberries, and each grower generally has his preference. The hill system is very de-

STRAWBERRIES IN THE HOME GARDEN OF H. PIESINGER, LE SEUER, MINN.

in while gathering the berries. This method of hill culture requires hand work almost exclusively. Another way to grow plants in hills is to make the rows thirty inches apart and set the plants twelve inches apart in the row. When this system is followed the twelve-tooth horse cultivator may be used just as with any other system. And another way is to have the rows thirty inches apart and the hills twenty-four inches apart in the row and have them set in check-rows so they may be cultivated both ways. Still another way of growing in hills is what may be termed the twin-hedge-row system; that is, make two rows sixteen inches apart, then leave a space of about thirty inches, then two more rows sixteen inches apart, and so on. The wider space is cultivated with horse tools while the narrow space is cultivated altogether with hand tools.

THE single-hedge row is obtained by making the rows three and one-half feet apart and setting the plants twenty-four to twenty-eight inches apart in the row. Then each of these plants is allowed to make enough runner plants to form a continuous row of plants, with the plants setting about six inches apart. After the row is formed, all the rest of the runners should be pulled or cut off before they form young plants.

Single-Hedge
Row

AN ideal way to grow fancy berries and the one best adapted to all classes of soils, is what we call the double-

hedge row. This system is made by putting the rows three and one-half feet apart and setting the plants twenty-four to twenty-eight inches apart in the row. In forming the double-hedge row, allow each mother plant to make four runners, layering them zig-zag or X fashion. Keep the vacant spaces between the young plants well hoed to prevent the forming of crust. Varieties making long runners may be set farther apart in the row than those making short runners, and the latter may be allowed to make six runners.

Double-Hedge
Row

THIS system is quite generally practiced in many localities, especially by growers who are in districts where fancy berries are not

so much in demand as a grade of berries of medium size. The narrow-matted row is not adapted to

Narrow-Matted
Row

growing fancy fruit because the plants are somewhat crowded in the row and do not have the room in which to build up a large fruit-bud system, neither do the roots have the space from which to feed to mature berries of large size. The narrow-matted row is formed by making the rows three and one-half feet apart and setting the plants twenty-eight inches apart in the row; then allowing enough runners to form so that when they are matured the plants in the row will be about fifteen to eighteen

inches wide. Under this system great quantities of fruit are produced, but we would

THE TWIN-HEDGE ROW

A FAMILY DISH OF PRIDE OF MICHIGANS

THE kind of late varieties. Each season brings new and more extraordinary records for the Pride of Michigan which is now recognized to be the greatest of the late varieties. J. A. Root, a prominent business man of Kansas City, Mo., in sending to us a specimen stem of fruit of the Pride of Michigan, writes us as follows: "I am sending you under separate cover one stem of strawberries, these being one of three stems borne on my Pride of Michigan plants bought from you in March 1908. This one stem had sixty-five berries and one bloom on it at the time I picked it, and from the size of the ripe berries I have so far gathered from these plants, I believe this one stem would have made five quarts of berries. My crop of strawberries this year is the wonder of the neighborhood, and these results were secured by following your instructions in 'Great Crops of Strawberries and How to Grow Them' as implicitly as possible." Prides yield fancy fruit only.

SEVEN SPECIMENS OF LONGFELLOW, THE WONDER OF THE STRAWBERRY WORLD

LONGFELLOW is the most wonderful early variety ever introduced. It is a great yielder of the most beautiful berries of the perfect strawberry type. In flavor and richness it surpasses all other early varieties. It is a good shipper, and therefore destined to be the great early market variety. Its fruiting season is very long, and the last picking is as deliciously sweet and as desirable as the first. We are the introducers of this variety, and plants may be obtained from no one else. This variety being new, our stock of plants naturally is not large. You should order early so that you may be sure of getting your share of them.

not advise growers who aim for large size and highest prices to adopt this method of strawberry growing.

Mulching the Plants

WE would no more think of leaving our strawberry plants unprotected during the winter months than we would of leaving valuable horses out in the cold unprotected. You often have seen horses and cattle which have wintered out in the open all winter—roughed it, as we call it—and in the spring they were poor and weak; and it would require half the summer for them to recuperate and sometimes they would not recuperate at all. The same thing is true of a strawberry plant. If it is subjected to all the changes of winter—the freezing, thawing, contracting and expanding of the soil—it undoubtedly will be just as much weakened and receive as great a shock as does neglected live-stock. On the other hand, take stock that has been stabled and well fed during the winter—they come out in the spring sleek and fat, strong of muscle and ready for a hard summer's work. Just so it is with strawberry plants that have been mulched. In fact,

such plants are stronger in the spring than they were in the fall because their roots are well established in the soil, and during periods when the ground was not frozen the roots have continued to grow; the crown is vigorous and full of vitality, and just as soon as the warm days of spring come the strong vitality of the plants force vigorous vegetative growth and insure the production of heavy fruit stems, full of fruit buds. The mulch not only protects the plants and keeps them strong during the winter, but it also holds the moisture in the ground during the hot summer days when the plants so much need all the moisture they can get. It also furnishes a clean place for the berries to ripen upon, thus preventing the fruit from being covered with sand and grit.

WHEAT straw, rye or oat straw, buckwheat, marsh hay and coarse stable manure all make splendid mulching. We prefer clean wheat straw if it can be secured. Millet, if cut when in bloom, makes a good mulching; so does corn fodder which has been grown thick enough to make it spindling and tough. If coarse stable manure is used, the finer

Materials for
Mulching

material should be shaken out into the space between the rows and the coarse strawy material placed directly over the rows of plants. Whatever the material may be, it should be put on at least two or three inches thick and the entire field should be covered.

IN the spring when growth starts you should take a common fork and go over each row, making a part in the straw directly over the

Removing Mulch
in the Spring

row of plants. This is done by taking the tines of a fork and working them back-

ward and forward across each row.

Some growers when they do this rake the mulching off too clean from over the plants, leaving bare ground directly in the row. When this

is done the principal feature of the mulching is destroyed, because it leaves the ground bare just at the place where the berries are to ripen and when it rains hard it will beat the sand over the berries and you will have dirty berries just as though you had not mulched at all. But if you will take the fork as we suggest and merely remove the coarser part of the mulching, leaving the chaff and finer particles to work down around the plants, there will be plenty of mulching material left in the row for the berries to ripen upon, and you will thus remove enough of the mulching to prevent the plants from bleaching or becoming weakened.

High winds at mulching time sometimes disturb the mulch. To prevent its blowing away throw some soil over the straw across the ends of the rows of plants and take a common breaking plow and plow all around the field, throwing soil on the edge of the straw.

Cultivating the Fruiting Bed

THE time is coming when berry growers will cultivate their beds during fruiting time just as they do at any other time of the growing season. We have done con-

siderable experimenting along this line and are sufficiently convinced of its merits to recommend it. What seems to confuse some growers in this respect is the matter of getting rid of the mulching. This is easily done. Simply rake the mulching from the center of the space between the rows close up to the edges of the row, leaving the mulching on each side of the row six or eight inches wide. This will be sufficient for the berries to ripen upon. The mulching along the rows will be so thick that it will make it almost impossible for any kind of obnoxious growth to

come up through it, and running the cultivators every week through the spaces between the rows will form a dust mulch and prevent any weeds from growing there.

Cultivation also breaks up the crust and admits air, which is very desirable to the growth of the plants, and it will hold more moisture during a dry season at fruiting time than possibly could be held by the artificial mulching. Cultivation should begin just as soon as danger of frost is over and continued every week until the plants begin to bloom.

Then discontinue cultivation until after the blooming season, during which time run the cultivators through every week until the berries are ripe. Then cultivate after each picking, unless it rains and makes the ground too wet. We have practiced this method and found it very satisfac-

tory. It increased the yield of berries 20 per cent.

THIS increase was due to the increased size of the berries which, of course, resulted in higher prices, because large berries always bring a better price than small ones. Cultivating the fruiting bed will almost double the development of the plants, and the larger the plants the larger will be the berries; that is, provided you have secured a heavy fruit-bud system before fruiting time. Another aid to

A DISH OF VIRGINIAS

ONE of the grandest early varieties ever introduced. Note the beautiful shape of the berries and the uniformity of them. Productiveness, vigor of plant and beautiful, highly-colored berries are characteristic of Virginia.

Bigger Berries
Higher Prices

A SAMPLE BOX OF BUBACHS

TO the grower of strawberries who has ever tested the fruiting powers of Bubach, it is something akin to the painting of the lily to speak in praise of the merits of this great variety. The above illustration is suggestive of the great size of the berry, but nothing short of the berry itself suggests its unusual beauty, and only experience will prove its extraordinary productiveness.

plant growth and an increase of berries will be found in the application of about fifty pounds of nitrate of soda per acre along the rows just as growth starts in the spring; repeat it before buds open. Apply the nitrates when the plants are dry and just before a rain.

Picking and Marketing Berries

JUST when to pick the berries will depend largely upon where they are to be marketed; that is, the degree of ripeness of the berries. If the fruit is to be shipped a long distance, the berries should be picked before they are fully ripened so that they will reach market in good condition, but for nearby markets wait until they are fully ripe. But no matter whether berries are to be shipped or sold at home, always leave a short piece of the stem on each berry. Berries always present a better appearance when this is done and the calyx remains undisturbed. Never pick berries when the vines are wet from dew or rain unless it is absolutely necessary. During a wet season you could not afford to defer the picking until the vines were dry. We find that berries will hold up better and will carry a longer distance if picked when perfectly dry than they will if picked the least bit damp. We also have found

that berries picked in the afternoon and shipped in the evening will carry over night in much better condition than those picked in the morning.

WHEN berries are sorted in the field by the pickers (and this ought to be the rule) it is a very easy job to pack the fruit so that it will present an attractive appearance. One or two good packers will take care of all the berries picked by forty or fifty pickers. It is only necessary to rearrange the top layer of each box, placing the stem ends down and showing the most attractive side of the berries. Before the box is faced in this manner the packer should place one hand lightly over the berries and tip the box enough so that he can look down into the bottom to be sure that the berries are just as good at the bottom as they are on top. Should they prove to be improperly sorted the number of the picker who gathered the berries will be marked upon the boxes. This makes it very easy to trace any poor picking to the one who did the work.

ONE very satisfactory way to market the berries is to arrange through the leading grocer in each town to handle them for you. Have it understood that you are to furnish

Packing
the Fruit

A BOX OF AUGUST LUTHER BERRIES FROM A REMARKABLE FIELD

THIS is a box of August Luther berries grown from Kellogg's Thoroughbred plants on Highland Fruit farm, Myrtle Point, Oregon, the photograph of which was sent us by the proprietor, H. B. Steward. There are thirteen berries in the box, and in his letter Mr. Steward says: "I marketed my first berries on the 10th of May, my last on October 20th. The plants yielded crops to exceed \$1500 per acre at 50 cents a gallon. This may sound big, but it is a fact that I picked two and one-half gallons from a single plant during the season, and one of my August Luther plants yielded 286 berries, ranging from five to seven inches in circumference." The most successful growers on the Pacific Coast use our plants, setting them in the spring.

the grocer with choice berries and that you are to name the price and pay him from ten to fifteen per cent. commission for selling them. The leading groccerymen in all towns are very glad to have the opportunity of handling fancy berries, more for the advertisement they get out of it than for the profit. Selling from house to house is a very desirable way for the small grower. Where berries are sold in this manner they can be picked early in the morning, even if the vines are wet with dew, because the berries are sold and used before they would have time to spoil.

Renewing the Fruiting Bed

AFTER your berries are all picked, the vines are pretty well exhausted. They are just about as tired as you are after a hard season's work; and if you will mow

off the foliage, loosen the mulching and, whenever it is too thick, scatter it out thinly, and when dry set fire to the patch and burn the entire field over, you will destroy any insects that might be prowling around, also any fungous spores. Mowing off and burning over also puts the plants in better condition for a second crop than any other thing we ever have tried. If the weather is exceedingly dry and has been dry for some time, we should mow off the vines, but would do no burning. We should rake off the mulching and old foliage and pile it up in some out-of-the-way place. If the burning was done during very dry weather, the heat from the fire might destroy the crowns of many plants. And do not burn over if it rains soon after you mow off the plants, as then they would burn slowly and the crowns would be seriously affected or destroyed. It

Marketing
Strawberries

Burning Over
the Field

A LOAD OF MOSS

WE show here a load of moss coming from the moss marsh. This wagon contains something like a ton and a half of this material; it takes about twenty to twenty-five loads of this moss to run us one shipping season. We generally gather this in August and September and have special buildings for storing it until needed.

will be found of great advantage to the fruiting bed if these directions are followed with great care.

AFTER you burn or haul the mulching off take a breaking plow and narrow down the rows by throwing a furrow from each side of the row into the center, leaving the row of plants setting on a narrow strip of soil

Narrowing
Down the Rows

between the two furrows. After this is done, you should take a hoe and go over each row, cutting out any weeds and grass. It is best to leave the plants pretty close together at this time; this will give you a chance to keep the best and sort out the poorest after they start growing again. Then take a five-shovel cultivator and run over the ridge which lies between the rows. This cultivator will level back the soil to its place. Then go crossways with a Hallock weeder or a spike-tooth harrow, but when the harrow is used be sure that the teeth slant backwards. This will make the ground perfectly level and draw just sufficient soil around the crowns to cover them so that the old plants may start their new root system. This will make them look like

a newly harrowed field, and you will see no plants at all. But it will be only a few days until you will find bright green plants springing up through the soil. Then when hoeing it is a good plan to cut out all of the plants except one hill about every twelve to fifteen inches. If the season is favorable, these hills which are left will produce enough runners to fill in a good double-hedge row for the next season's fruiting. The cultural methods of the renewed bed should be just the same as in the case of young-set plants.

MANY inquiries come to us asking what to do with the runners produced by plants in the fruiting bed during the fruiting season.

Runners in the
Fruiting Bed

We never have paid any attention to these runners more than to experiment by removing them from a few plants, and we could not see enough difference in favor of doing this work to justify the expense.

We also have a great many letters asking if the runner cords on the young-set plants should be severed from the mother plant after the young plant takes root. This is not necessary as nature takes care of this work. Just

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

as soon as the young plant gets its roots well established in the soil and starts feeding from the soil, it ceases to draw upon the mother plant and, therefore, it would be of no value to disconnect it from the mother plant.

EVERY grower, whether producing strawberries on a large or small scale, should have a small plot of ground for experimental purposes. Here he should test a few plants of all the leading varieties, also plants of any of the old varieties which he never has tested. Twenty-five plants of each variety would be sufficient to make a thorough test, and this is really the only way to determine which varieties do the best in your particular soil and locality. The berries produced by these plants in the experimental plot will more than pay the cost of the plants and all of the work put on them, and you will

thus learn the merits of the different varieties. You also will find the testing bed the most interesting spot on your farm, and you will look forward with pleasurable anxiety to the fruiting of the many different varieties you are testing.

Chickens and Strawberries

THIS illustration is suggestive of the advantage of combining chickens and strawberries as a joint commercial enterprise. It will be difficult to conceive of a more perfect combination, as the poultryman's leisure hours come at the strawberry season and at a time when his revenues from the poultry yard are at their lowest. Another feature of this combination, and a very important one, is the high price the poultryman receives for his chicken

droppings through the marketing of his strawberries that are

KELLOGG'S THOROUGHBREDS IN BLOOM

THOROUGHBREDS 'WAY OUT IN IDAHO

THIS photograph illustrates the one-fifth-acre strawberry patch of Kellogg plants on the farm of W. H. Garner of Preston, Idaho, from which he sold \$125.00 worth of strawberries in 1909. He writes August 21, 1909: "It's no trouble to sell 'Thoroughbreds'! Everybody says my berries were the best they ever saw. I picked ten of them which weighed one pound. The plants I got of you this spring are doing fine." Mr. Garner is only one of many Idaho patrons who find our plants always win success.

with this by-product of the poultry yards. The man who grows strawberries, using this by-product, and who stores up the fertilizer which he has sprinkled with land plaster or dust and stored away in barrels or boxes until the time for its use, will be assured of the very largest possible returns from his strawberries and consequently from his fertilizer.

Every man who has raised chickens and any kinds of fruit, whether orchard fruit or small fruit, knows the high value of chickens as destroyers of injurious insects and worms, and for the greater part of the season the chickens may be trusted to feed among the plants, with positive assurance that very few insect pests or worms will be left alive in the field. After the new plants get to growing nicely turn in some old hens with their little chicks and let them follow the cultivator. It is wonderful what devastation they will make among the worms and bugs. However, be careful to keep the chickens out of the strawberry bed after the plants are mulched and while the runners are taking root.

The large poultry-house shown herewith, with its fine shade trees and beautiful row of strawberry plants stretching away to its front in full blossom, is the ideal of what this combination may mean to the man who enters

with spirit and intelligence into this dual work. Already many of our patrons have worked out this combination to splendid success.

Heeling-in the Plants

FOR several years we have advocated the importance of having plants shipped early in the season while they are dormant, the customer heeling them in to hold until ready to set them. During the spring of 1909, we had plants shipped to us for testing from California.

They arrived in the early days of March. Our ground was frozen, but we cut through the frozen earth and heeled the plants in as we illustrate on Page 17. After heeling them in we covered them lightly with straw. The same day the plants were heeled in came a snowfall, and at several different times the ground froze quite hard. The plants remained heeled in until the latter part of April, leaving them in the heeled-in trench for nearly two months. When our soil was in condition to set the plants they were taken up and set out, and we do not believe we lost three per cent. of them. We are thoroughly convinced that the proper plan for all customers to follow is to have plants shipped

Proved by
Experience

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

THOROUGHBREDS THAT ALWAYS TOP THE OREGON MARKET

THE above illustration is of the twin-hedge rows of Kellogg plants of A. H. Finnigan, located just out of Portland, Oregon.

In his letter accompanying the photograph Mr. Finnigan says: "I had a most successful season this year, knowing exactly where every crate of berries was going before it was picked, and my 1910 crop already is engaged. No trouble to sell fancy fruit here!" Mr. Finnigan made the same flattering report in 1907 and in 1908. Kellogg's plants always win when they are properly handled, and a glance at Mr. Finnigan's field leaves no doubt as to the attention he gives the plants.

just as early in the spring as possible and when they arrive heel them in.

W E had plants of several other varieties come from the South and Southeast early in March, possibly a month before our ground

**Important
Advantages**

was ready to set them, and they also were heeled in and shaded lightly with straw. If at any time it turned cold and threatened to freeze, all the plants were covered with straw sufficiently heavy to prevent them from freezing, and if in the day time it turned a little warm the plants were uncovered. Looking after the plants in this manner did not require five minutes of time a day, and all of these plants have grown splendidly. A thousand plants heeled in will occupy only one trench about a rod in length. However, if you do not approve of this method and insist upon having the plants shipped late in May, there is no concern in the country better equipped to make late shipments than the Kellogg Company. We are located in the far North where plants remain dormant until quite late, and our method of packing the plants is as near perfection as possible. One point favorable to having plants come forward early is the fact that when we start digging and shipping

the plants are perfectly dormant and will carry to California and back in good condition. The plants at this time weigh very little, which makes express charges much lighter.

The Price of Plants

T HE expense of fertilizing and properly preparing an acre of ground is too great to justify anyone in using unfruitful plants just because they are cheap. The first cost of your plants is not what determines their cheapness, but the fruitfulness of the plants—the quality and quantity of berries they are capable of producing—is what proves the plants to be costly or otherwise.

Those who have been using the Kellogg strain of plants for years know that there is a difference in the fruiting power of plants. They also know that plants of the Kellogg quality are the least costly plants to set. But to those who never have tried them and who might wonder why they are not sold in competition with other plants we will say the Kellogg plants have no competition; they are in a class by themselves. We do not say this boastfully, but it is well known that the Kellogg Company is the only concern in America having a breeding bed from which to select

DIGGING THE
PLANTS PACKING
PLANTS

plants of an ideal type for propagating purposes. Productiveness, healthfulness and purity ever have been our aim, and our Thoroughbreds have won prizes or honorable mention in nearly every agricultural county in the United States, and in every province of Canada, as well as in several of the European countries and Australasia, they are famous. One of our old-time customers from Wisconsin moved to Cuba. We received an inquiry from her for a catalog, and in writing she said that as soon as the catalog arrived she would send us an order for plants. We replied that as the plants would have to go so far by boat we would rather she would send no order. But she was not thus easily put off, and we quote her next letter:

"SAN CLAUDIA, CUBA, Dec. 29, 1908.

"I received your letter today saying you did not ship plants to Cuba. I wish to say that we can not and will not plant any but the Kellogg plants. If you will pack them as carefully as the Kellogg plants always have been packed for us, we will run the risk. They will reach Havana in seven days by express, and we will be there to receive them. One shipment of Kellogg Thor-

oughbreds that came to us when we were living in Wisconsin was delayed enroute and was three weeks in reaching us. They were in fine condition—never lost one plant. Let us know what you will do at once, so we may send in our order.
MRS. H. R. PALMER."

We immediately advised her that we would ship the plants, and back came a \$20 order.

Mrs. Thompson referred to our methods of packing plants. Here is a letter from another customer who appreciates our methods of packing and shipping plants:

"The strawberry plants shipped by you arrived in fine condition. Mr. Thompson desires to express his pleasure at the receipt of such hardy, vigorous, healthy-looking plants. What impressed us most of all was the manner of packing for shipment—it is superior to anything we have ever seen. Not one broken root was detected nor any plant with small rooting. While the bunches were very compact, the roots were not matted or felted together as is frequently the case. The long roots with a multitude of delicate fibers; the moss that keeps the roots moist; even the tying of the bunches and the complete package—all

CULTIVATING THE PLANTS

SPRAYING

DIGGING THE
PLANTS

plants of an ideal type for propagating purposes. Productiveness, healthfulness and purity ever have been our aim, and our Thoroughbreds have won prizes or honorable mention in nearly every agricultural county in the United States, and in every province of Canada, as well as in several of the European countries and Australasia, they are famous. One of our old-time customers from Wisconsin moved to Cuba. We received an inquiry from her for a catalog, and in writing she said that as soon as the catalog arrived she would send us an order for plants. We replied that as the plants would have to go so far by boat we would rather she would send no order. But she was not thus easily put off, and we quote her next letter:

"SAN CLAUDIA, CUBA, Dec. 29, 1908.

"I received your letter today saying you did not ship plants to Cuba. I wish to say that we can not and will not plant any but the Kellogg plants. If you will pack them as carefully as the Kellogg plants always have been packed for us, we will run the risk. They will reach Havana in seven days by express, and we will be there to receive them. One shipment of Kellogg Thor-

CULTIVATING THE PLANTS

oughbreds that came to us when we were living in Wisconsin was delayed enroute and was three weeks in reaching us. They were in fine condition—never lost one plant. Let us know what you will do at once, so we may send in our order. MRS. H. R. PALMER."

We immediately advised her that we would ship the plants, and back came a \$20 order.

Mrs. Thompson referred to our methods of packing plants. Here is a letter from another customer who appreciates our methods of packing and shipping plants:

"The strawberry plants shipped by you arrived in fine condition. Mr. Thompson desires to express his pleasure at the receipt of such hardy, vigorous, healthy-looking plants. What impressed us most of all was the manner of packing for shipment—it is superior to anything we have ever seen. Not one broken root was detected nor any plant with small rooting. While the bunches were very compact, the roots were not matted or felted together as is frequently the case. The long roots with a multitude of delicate fibers; the moss that keeps the roots moist; even the tying of the bunches and the complete package—all

PACKING THE
PLANTS

show that you have made the packing of plants as much of a study as we have the packing of chicks.

"Yours truly,

"THE OHIO HATCHERY & MFG. CO.

"Bellevue, Ohio, April 29, 1909."

The New Varieties We Offer

THIS season we offer to our customers six new varieties, every one of which already has won high reputation and in whose great value we have the utmost confidence. The past few years have been prolific in excellent originations, and from those offered we have selected these as worthy a place in the Kellogg list. We hope that you will not fail to give them a trial if only twenty-five plants of each variety be the size of your order.

Early Ozark is a cross of Excelsior and Aroma, and combines all of the excellencies of both of these old favorites, while it is reported to be earlier even than Excelsior itself. Added to earliness are great productiveness and strong shipping qualities, insuring uni-

SPRAYING THE PLANTS

SHIPPING THE
PLANTS

versal demand at once. Ozark is a powerful bisexual.

Highland is an early variety, and for five years excelled in prolificness every variety tested by the Ohio Experiment Station and the number of varieties tested was 146—certainly a fine showing, and one which has been confirmed by the experiences of practical growers. It is a pistillate, and is said to possess all of the best qualities of Crescent, with the berries somewhat larger.

Heritage is an early bisexual that won instant favor upon its origination, and is declared to possess every quality of flavor, size, color and shipping stamina that goes to make up the ideal strawberry.

Fendall is another early bisexual with an unusually long fruiting season, which explains in part its unrivalled yield of 16,800 quarts to the acre. It is as beautiful and delicious as it is prolific.

Buster suggests very appropriately the quality that is making this medium-to-late pistillate variety famous, for it is breaking many records, one of which concerns its wonderful frost-resisting powers; the other is its

MULCHING THE PLANTS

BRANDYWINES MAKE A FINE SHOWING IN OKLAHOMA

OUR customer, G. K. Bowman, of Stroud, Okla., sends us a beautiful post-card on which appears the photograph of two of the Brandywines grown from Thoroughbred plants purchased from us in 1908. Each berry, he says, measured more than eight inches in circumference, and he had many that reached this size. He sold \$70 worth from his little patch, and now intends to establish a ten-acre strawberry field. The photographer was careful to make the picture the actual size of the berries.

wonderful yields of large fine fruit.

Chesapeake is a notable addition to the list of late bisexuals, concerning which we have received letters from Eastern growers declaring it to be the long-looked-for late variety that has all of the virtues of the ideal strawberry. It is said to be a scion of Gandy, is quite as beautiful in form and larger in size than that famous old stand-by, and is a variety which all should give a thorough test this season.

The Family Garden

IN town or on the farm the family garden without strawberries is incomplete. We believe there is no other one thing grown in the home garden that may more easily be taken care of than a bed of strawberry plants. The cost of the plants themselves is but a trifle. Three or four dollars invested in well-developed plants will produce all

THE lower figure shown herewith is a bloom of the male strawberry plant. Note the ball-like pendants; these are the anthers which contain the pollen with which the stigmas both of the male and female plants are fertilized. The upper figure is a bloom of the female, or pistillate plant. You will observe it has no anthers but only stigmas. Through these stigmas the pollen of the bisexual plant is conducted to the pistils and thus are both male and female plants perfectly fertilized.

the berries of the very best quality that a large family of eight or ten could possibly use, and we are figuring that you will have strawberries every meal throughout the entire fruiting season, with plenty to can and jam and preserve to last you throughout the winter until strawberries ripen again. If you will follow the methods laid down in this book and give your strawberry plants the care they deserve, we believe it would not be overestimating it to say you would have enough berries to sell to more than pay for the cost of the plants, as well as for what little work you have expended upon them. When it comes to beauty there is nothing you can grow that will add more to the appearance of a home than a nicely kept bed of strawberry plants.

Strawberries are the first fruit to ripen in the spring; just at a time when it requires a great deal of planning for the housewife to

Longfellow, B. (Male)

EARLY TO LATE. Bisexual. The reason we class Longfellow as early to late is that it begins ripening with the very earliest varieties and continues the production of fine fruit until very late in the season. In size the Longfellow is very large and produces the largest number of uniformly big berries of any variety of its season. In form it is very long and of the perfect strawberry type. In color it is dark red, the rich deep redness extending from circumference to center. The flavor is the richest of any variety we ever have tested and it is mild and sweet. Longfellow is unequalled in productiveness; with us it even surpasses such varieties as Senator Dunlap, Warfield and Haverland. The skin of this variety is very tough, making it one of the best shippers ever introduced. The calyx is large and remains green after the fruit is picked; foliage is light green, grows tall, has a perfectly formed leaf, and the plant is exceedingly heavy and vigorous. It makes strong runners and lots of them. It is a profuse bloomer and every bloom is perfect. It is therefore most valuable as a pollinizer. We do not hesitate to say that Longfellow, set with Virginia, would result in making the greatest team of strawberries, staminate and pistillate, ever grown together. We have been selecting and fruiting this variety since 1905 and its performance in our fruiting bed gives us assurance that it is a variety that will succeed anywhere and in any kind of soil.

Virginia, P. (Female)

EXTRA EARLY. Pistillate. Last year we introduced to our patrons this marvelous early pistillate variety, and the performance of Virginia during the past season has more than justified our highest claims for that berry. The vines in our testing bed were literally crowded with large, round and beautiful berries such as this variety is famous for producing. In size the Virginia ranks very high among the extra-early berries and is unusually uniform in this respect as well as in its unique form, being of the perfect strawberry type with an obtuse point. In color it ranges between scarlet and crimson and is of identically the same shade throughout. In flavor the fruit is tart and very rich. Although a comparatively new variety, Virginia has sprung into great popularity because of its very heavy yields of uniform fruit and its fine shipping qualities. One grower reports 12,000 quarts from a single acre of Virginia. The plant is extra large, bright green in color, stands very high, and its stems are large and strong, holding the fruit well up from the ground. The plant is a deep rooter and this fact, combined with its dense mass of foliage, insures its success even under the most trying drought. Last year we advised our customers to try some of the Virginia. This year we can say in all confidence, set as many plants of this variety as you possibly can. Set them with Longfellow and the Virginia will be perfectly fertilized. This is the third year we have been breeding this extraordinary variety.

get up a meal. It is mighty nice, when company comes unexpectedly and you can invite them out into your garden while you gather three or four quarts of big red berries in connection with an assortment of garden vegetables; and we believe if you will study the photo-engravings on the different pages of this book which refer to the home garden, you never will be satisfied to go through another year without having a strawberry bed that you can call your own.

If you were to buy the berries which three dollars' worth of plants would produce, it would

cost you all the way from twenty-five to fifty dollars. It's a pretty good investment—don't you think so?

Some Shipping Suggestions

A LARGE percentage of our customers when sending in their orders leave the shipping date entirely to our judgment, while others name a specified date on which they wish their

Early Ozark, B. (Male)

EXTRA EARLY. Bisexual. As its name indicates, it is one of the earliest varieties ever originated, and it has the reputation of yielding the largest fruit of any of the extra-early varieties. In size it ranks with Klondike, Aroma and Gandy, fifteen berries filling a quart rounding full. A cross between Excelsior and Aroma, this variety combines the excellent characteristics of each of these varieties, being larger and sweeter than the Excelsior as well as ripening somewhat earlier. A staminate variety, it is unusually strong in pollen, therefore excellent for mating purposes. It is of firm texture and is very productive, hence is popular with commercial growers both as a yielder and shipper. We have not fruited this variety sufficiently long to recommend it for more than a trial, but it has such a high reputation among those who have grown it as to give it a place in the front rank of the extra-early varieties. Be sure and secure a sufficient number of plants of this variety to give it a thorough test this season.

Michel's Early, B. (Male)

EXTRA EARLY. Bisexual. Michel's Early is one of the universal favorites, and during the nineteen years it has been in our breeding beds has won steadily increasing popularity. The berry is a rich crimson in color, medium in size, the color extending almost evenly over the entire surface of the berry. The form is varied, some of the berries being nearly top-shaped, while others are round, and few varieties look more handsome than does Michel's Early when neatly packed in boxes. Seeds are of light brown, with the exception of those on the tip end of the berry, which are a bright yellow. The flavor of this variety is rich but mild; the meat is deep pink throughout, and it has the very great advantage of being a fine shipper. The calyx is of medium size, standing up straight; foliage is light-green and tall, and the leaves are rather long. Michel's Early makes a great number of runners, but where runners are kept down closely a powerful crown is developed and large yields of delicious fruit invariably result. Michel's Early is a strong pollenizer.

plants shipped. To the latter we wish to say that we will carry out their instructions as nearly as it is possible to do so, but our digging season comes in the early spring when weather conditions cannot be depended upon, and just at the time we begin filling the orders having a special date we may be detained by rain or some other conditions over which we have no control, thus causing delay in shipping these orders. Other patrons defer sending in their orders until they are ready to have the plants shipped, with a request that the plants go forward upon receipt of their order, and then are annoyed because the plants do not reach them in a very few days. We certainly have no object in deferring shipments, and you may rest assured that we shall give your order just as prompt attention as possible. If the shipping date is left to us, it is our aim to send the plants at the time we deem it best to set them in the particular locality to which the plants are going, and it is seldom we fail to get out an order on the date requested by the customer. With this word of explanation we are sure that no one will become impatient should

weather conditions compel us to delay shipping plants for a day or so.

ALL large orders for plants should be shipped by express, whether the distance be short or long, as it is the least expensive and most certain method. Freight is too precarious, as it sometimes happens that shipments made in that way are held up for many days—something to which perishable goods never should be subjected. When less than two hundred plants are ordered to be shipped to any part of the United States east of the Rocky Mountains, it will be cheaper to have them go by mail than by express, and where plants are to go west of the Rocky Mountains to the Pacific Coast States, it will be cheaper by mail for as many as three hundred plants; and, no matter where the plants are to be shipped, when one hundred or fewer plants are ordered it always is less expensive to have them go by mail.

OUR mail-order packages receive great care. They are first wrapped in the best grade of wax paper, and then are done up securely in

August Luther, B. (Male)

EXTRA EARLY. Bisexual. The Luther is a bright-colored berry of medium-large size, round in form, full at the calyx and tapering to an obtuse point. Rich yellow seeds are set prominently upon the surface and make a striking contrast to the bright, red fruit. The flesh of the berry is a wine color, growing lighter as it approaches the center; mild and delicate of flavor it is very fine grained and in every way delicious. As the illustration shows, the calyx is very large and curls back towards the stem; it is attached to the berry by a small neck that makes preparation for the table a very easy matter. Among the reasons for the extreme popularity of August Luther is its great productiveness, the high quality of its fruit and its unusual sweetness. It has been under our methods of selection and restriction for eleven years, and both as a market and family berry it has steadily added to its long list of enthusiastic patrons.

Texas, B. (Male)

EXTRA EARLY. Bisexual. "Another universal favorite, famous for producing extraordinarily large crops of big glossy crimson berries, with dark red cheeks shading down to a rich cream. When packed in a box the berries present an exceedingly attractive appearance. The seeds are bright yellow and the color combination of the berry itself, united with the bright green calyx that droops over it, gives to this fruit a unique attractiveness that commands instant and favorable attention. The flesh of the Texas is firm; it is strong as a long-distance shipper; the meat is rich and juicy, the flavor being somewhat tart; it is an excellent canner. To all these essential qualities is added the fact that this great variety thrives everywhere, showing little, if any, partiality to any soil or climate. Texas has been in our breeding bed for eight years, and we do not hesitate to recommend it without qualification as a market berry of the highest grade. The increasing demand for this variety proves that our customers, like ourselves, are thoroughly convinced of its excellence.

heavy express paper and tied in such a manner as to insure safe delivery. Every bunch of plants

is trimmed with shears before wrapping. For this extra work and postage on the plants we charge 25 cents for each hundred plants. On varieties that make small plants one hundred will not require 25 cents postage, while on varieties that make a very large plant postage often exceeds 25 cents per hundred plants. We have, therefore, adopted a uniform price of 25 cents for each one hundred plants that go by mail to any part of the United States.

BEFORE completing the 1909 edition of "Great Crops of Strawberries and How to Grow Them" we were informed by the postal authorities that the postage to Canada on strawberry plants was at the same rate as in the United States, and we mentioned this in that edition,

Canadian Mail
Shipments

but just after we had begun shipping plants to Canada the postoffice officials notified us that they were in error in giving us that information and that the postage to Canadian points "on

seeds, plants, etc.," is just double that to points within the United States. So when our Canadian friends are sending in their orders for plants to go by mail it is understood that they will add 50 cents per hundred plants, which is to pay for the extra expense in doing up the packages and the postage on same, and even at this rate, in most parts of Canada, the postage will be less on small orders than the charge for express.

WE generally begin digging and shipping our plants the latter part of March and continue the work until the first of June. Our plants always remain in the field under the

Our Shipping
Season

mulch until we are ready to dig them. We never have or never will place strawberry plants in cold storage. You may rest assured that every plant you get from the Kellogg farm comes fresh from the propagating beds, and as soon as they are taken from the soil they are counted and packed so that they should reach you as fresh as the day they

Excelsior, B. (Male)

EXTRA EARLY. Bisexual. Excelsior is a dark-red berry with small dark seeds, the combined effect of which gives to the fruit a brightness most attractive when they are placed, neatly packed, on the market. The berry is almost round in form and of medium size. The green calyx curls over the fruit in such a way as to create a fine contrast. The flesh is a rich red, somewhat lighter than the outer surface. It is very solid and has a rather tart, though extremely rich, flavor. Excelsior has won a popular place in the home because of its excellence as a canner, retaining its shape better than do most varieties after being cooked. Among commercial strawberry growers it is popular because of its splendid shipping qualities; form and color are retained for days after being picked and endure a long journey without being in the slightest degree affected. These qualities make Excelsior one of the most profitable berries grown on the market. This is the fourteenth year Excelsior has been under our system of breeding and selection.

Climax, B. (Male)

EXTRA EARLY. Bisexual. The Climax is a universal favorite because of its beauty, its extraordinary yields of delicious fruit and its excellence as a shipper. A rich dark-red berry, conical in shape and having a glossy surface, the fruit commands instant attention when shown in the market. The seeds are bright yellow except on the darker side, and there they are a trifle lighter than the outer surface, the dark red extending to the very center of the berry. The flesh is firm, rich and juicy. These qualities have made it an ideal all-round berry—a favorite with growers who produce them on a commercial scale and equally popular in the family garden. The calyx is small for so large a berry, and the plant stands erect and grows unusually tall. This is the sixth year that Climax has been in our breeding beds, and we note a constantly increasing demand for this most attractive variety. No one who would grow fine early fruit should fail to have a generous number of our Climax in his fields.

WRITING under date of June 10, 1909, James A. Henry of The Oaks, Lexington, Tenn., says: "Find enclosed picture of pedigree strawberry plants purchased of you in the spring of 1908. Photograph was taken May 1, 1909. Sold my first crate on that date. This is admitted by everyone to be the finest field of strawberries ever seen in this community. The yield was enormous notwithstanding the very wet weather, and sales were good."

were dug. While our shipping season continues up until the first of June, we urge you to send in your orders early in the winter and allow us to ship the plants early in the spring while the plants are dormant. We refer you to the article on "Heeling-in Plants," which will give you the reason why we encourage early shipping; also see illustration on Page 17. However, if you feel that it is impossible for you to have the plants come forward until you are ready to set them, we will see to it that your plants are dug and shipped at the time you ask us to do so, provided you do not set the date later than June 1.

WE never have advocated fall setting of strawberry plants because at that time of the year the plants are in a green, growing condition, and will not stand shipping and transplanting. About the last of September our plants begin building up their fruit-bud system, and to take them from the ground during this period would be very detrimental to them; besides the plants never are sufficiently rooted at this time of the year to insure success, and for this reason we have adopted

Fall
Setting

Highland, P. (Female)

EARLY. Pistillate. A variety which has won large fame as a money maker. The Ohio Agricultural Experiment Station places this variety at the head of all others for productivity. In 1904 it reported the Highland as being the most prolific out of 146 varieties tested on the station ground; in 1905-6-7 the reports made by this station concerning this variety also were to this effect. Its general characteristics are compared with those of the Crescent, only that the fruit of the Highland is said to be much the larger. The fruit is medium to large, bluntly conical. In color it is bright scarlet and the flesh is red from circumference to center. Plants are very large, strong and vigorous. Of its shipping qualities the Ohio Station report says: "Notwithstanding that it might truly be said it is not firm enough for a commercial variety where long shipping would be necessary, it is amply firm for the grower who is in reasonable distance of his market, and for this class of growers the Highland gives great promise of becoming a great 'business' berry and a money maker for even the small planter." Results secured from commercial growers in many sections fully confirm these reports of the Ohio Station, therefore we confidently recommend our patrons to make a trial of this variety.

Heritage, B. (Male)

EARLY. Bisexual. A new variety which has won instant recognition from high-class growers all the country over and is pronounced by G. B. Brackett, Pomologist of the United States Agricultural Department to be "remarkable for its shape, fine color and excellent qualities." In size the Heritage ranks among the largest berries ever introduced and in size of yield the same thing may be said. One fine feature of the variety is the uniformity in size of the berries. In color they are of a dark lustrous shade of crimson, with brilliant golden seeds, and are among the handsomest berries shown upon the market. The Heritage is supposed to be a seedling of the famous Marshall variety. In shape the berry is long and conical with an obtuse point. The flesh is fine. The foliage is very heavy, of most attractive shade and many leaves measure nine inches across. The root system is very large and penetrates the soil to a great depth, making an exceptionally valuable variety in seasons of extreme drought. We hope that no patron will fail to secure at least a few of this variety for testing purposes.

a positive rule against fall shipment, from which we cannot deviate; and this is done in your interest, as well. If we wished to do so, we could ship large quantities of strawberry plants during the fall months and make some money by doing it, but at the same time we should be taking your money when we knew full well that we could not give you your money's worth. We have not reached the point where we wish to do this, and we are sure that after making this explanation you will not ask us to deviate from our rule.

Advice to Beginners

IF you never have had any experience and want to make strawberry growing your business, we would suggest that you do not start with more than one acre; this will require 6225 plants. We are figuring that the rows will be made three

and one-half feet apart and the plants set two feet apart in the rows. One year after this acre of plants is set, they will produce their first crop of berries, and when that crop is harvested you will have had the experience of growing, picking and marketing. Then you should be ready to increase the acreage according to your market and other conditions. You may think this to be queer advice to come from a company recognized to be the world's largest producers of strawberry plants and having many millions of plants to sell. But our aim is to start you right and keep you right so that you will make a success from the very beginning. Then we have won your confidence and friendship and your patronage for years to come. We wish you could read some of the grateful letters which come to us from beginners who were over-enthusiased and who wanted to start with five acres and whom we encouraged to come down to one acre. They tell us how important was the first experience and how fine their plants now look; that everything points to their success. This might not have been the

Lovett, B. (Male)

EARLY. Bisexual. This variety steadily grows in popular favor. During the eighteen years we have bred this variety under our methods of selection it has forged its way to the front and today is one of the "old stand-bys." This variety grows a berry large in size and of deep crimson color; for the most part the fruit is conical in shape with long points, but there are just enough variations in the form of the fruit to make it particularly attractive when packed in the box. The flesh is a dark, rich red and is very juicy. In flavor it is sufficiently tart to make it an excellent canner. The seeds are bright yellow, standing out from the surface, and add not a little to the generally pleasing effect of this fruit. The calyx is very small for so large a berry, and lies flat upon the fruit for the most part, the rest of the calyx curling back towards the stem. Lovett ranks high as a shipper as it holds its bright color for many days after picking. These fine qualities combined with great productiveness insure a constantly increasing vogue for Lovett.

Tennessee Prolific, B. (Male)

EARLY. Bisexual. Lovers of the sweet strawberry declare that this variety is one which meets their ideal of strawberry perfection. To this exceedingly popular quality Tennessee adds those of great prolificness and beauty. The berry is medium-large, bright crimson in color and, for the most part, is rather long and corrugated in form. The seeds color to a rich red as the berries ripen and are sufficiently prominent to add distinctly to the general appearance of the fruit. The flesh is fine of grain, very juicy and in color is a decided pink. Its close-grained surface marks it as a fine shipper and it is equally popular as a canner. The calyx is large. Prolific as a producer of fruit, it also is prolific of runners, and as a pollenizer ranks among the first. This is the twenty-second year we have had Tennessee Prolific in our breeding beds, and the more we see of its performance the better are we satisfied of its unusual value, considered from the viewpoint of either the commercial grower or that of the family gardener.

case had they used their own earlier judgment and set out a large area.

AFTER you read the descriptions which appear under the strawberry cuts representing each variety, if you still are unable to make a selection, or, if you are not clear as to how many plants to order, tell us about it. **We Help Beginners** Give us the size of the piece of ground you intend to set to strawberries and we will select the exact number of plants required to set your patch and from the varieties that will do best in your locality, covering the season from the earliest to the latest, so that you may have the choicest of berries throughout the entire fruiting season. Or, if you will advise us what season you prefer your berries to ripen in, whether early, mid-season or late, we shall be governed by your wishes, of course. We also will advise you how to set the different varieties so they may properly be mated, and will give you any other information you may need to insure you big crops of big red berries. Hundreds of customers send the amount of money they wish to invest in plants, with instructions to send them as many plants as their money will pay for and to give them the

varieties that, in our judgment, will give them the best returns. The fact that these customers repeat this from year to year is pretty good evidence that they prefer to use our judgment rather than their own. Perhaps this plan will suit you; if it does, we shall be pleased to list you with these friends and will look after your interest in the best possible manner. And let us suggest that you send in your order early during the winter months, if possible, so that we may book your order and save the plants for you. Customers who have dealt with us for years always send in their orders early because they realize that the demand for the Kellogg strain of plants is far in excess of the supply, and by ordering early they are assured of getting plants of the varieties of their preference. If you will get your order in early we shall see that you are not disappointed in getting your share of these famous plants.

CAREFUL as we have been to cover the details of strawberry growing in this book, we realize that in the nature of the case there are certain to be some details omitted which may be of importance to you. It may be possible you have in your locality some local conditions which we

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

Warfield, P. (Female)

EARLY. Pistillate. Few varieties are so universally and favorably known as is the Warfield. This is the twenty-third year of selection in our breeding beds, and our strain of this variety has found favor in every section of North America from the Mexican border to Alaska. It thrives in all soils and under all sorts of climatic conditions, and it would be quite impossible to enumerate all of its fine qualities. In size it is large and in form quite the ideal; its exterior is a glossy dark red, which does not fade or become dull after picking. The flesh is a rich dark-red clear to the center; it is very juicy and just tart enough to give it a fine relish. As a shipper it has no superior, and goes on the market at a long distance from the shipping point as fresh and beautiful as when picked from the vines. The fruiting season of the Warfield is exceedingly long and the yield throughout the season is very large.

Fendall, P. (Female)

EARLY TO LATE. Pistillate. This variety is famous for its long fruiting season. Berries have been gathered from the same patch on the 25th of May and on the 4th of July. A seedling of the Wm. Belt, originated in the spring of 1905, it has won highest favor on seven distinct counts wherever grown: 1, great vigor of plant growth; 2, unusual size; 3, delicious flavor; 4, length of bearing season; 5, wonderful productiveness; 6, beauty and symmetry of form; 7, its extraordinary root system. One grower reports a yield at the rate of 16,800 quarts per acre. The foliage is large and the root system is very heavy. Do not fail to order some of this great variety. It will prove a winner in your market. The illustration is the exact size of the original, and shows the extraordinary and very beautiful form of this variety, which promises to become a world-wide favorite.

have not touched upon, or it may be there are some departments of the work we have not made plain to you. In such a case the way

Ask Us to get the desired information is to
Questions write us and ask questions. When writing we ask that you put your questions on a separate sheet from your letter. This gives us a chance to study your questions carefully and answer them in a more satisfactory manner than could be done were they all mixed up throughout your letter. Do not make any apology whatever. We like to get your letters and your questions, and you may rest assured every question will be answered by one who thoroughly understands the work, and that your inquiries will receive immediate attention. No matter what kind of information you want, if it relates to the strawberry business, we shall deem it a great pleasure to be able to give you whatever suggestions we can. If you will number your questions we will answer them in the order given, which will make our answers more easily understood. Better preserve a duplicate copy of the questions you ask.

Field Mice and Moles.—We receive many complaints that field mice and moles create havoc in

THE above illustration shows the patch of Israel G. Crouthamel of Silverdale, Pa. at picking time. Mr. Crouthamel writes: "The plants in this field were purchased from your company and have proved to be very fine stock. Last season from an acre I cleared over \$360, and many days the demand for the berries far exceeded the supply. I shall have three acres next season and expect to clear at least \$1000 from them. Most all the plants were Senator Dunlap, and the berries were of fine quality." Our strain of Dunlap leads them all.

Wolverton, B. (Male)

EARLY. Bisexual. Wolverton is another variety that adds to its list of friends every year. It has a crimson berry of the ideal strawberry form, and never fails to attract and hold the admiration of the customer. The upper side of the fruit colors red when fully ripe, and the seeds are darker than on the under side, where they are a bright yellow. These contrasting colors give to the fruit a beautiful and attractive appearance, and when packed in the box it makes a tempting picture. As beautiful as is the Wolverton to the eye, it is quite as attractive to the palate. Indeed, it is one of the richest berries grown, and its fine-grained flesh and mild flavor of unusual delicacy make it universally popular. Twenty years of experience with the Wolverton makes it possible for us to pronounce it one of the greatest all-round berries ever propagated.

the strawberry field. The best remedy as yet discovered is strychnine used in the following way: Take an ounce of strychnia sulphate and dissolve it in a pint of hot water, to which add a pint of heavy sugar syrup. Take a half-bushel of wheat and stir into this liquid until every grain is wet. Let the mass stand in the mixing vessel for twelve or more hours before disturbing it, and then scatter the poisoned grain about the runs of the mice and moles.

Concerning the Root Louse

THE presence of ants about strawberry plants almost invariably indicates the presence of the root louse (aphis), which will suck the life out of the plants by working at their roots. The ants visit these lice to obtain the sweet secretion which they give off. If this be the case, the first thing to do is to destroy the ants. If there are large ant hills to be destroyed, the best and easiest method is to use carbon bisulphide as follows: Thrust a crowbar or sharp stick to a depth of eight or ten inches into the ant hill. Pour in one full ounce of carbon bisulphide and quickly close the opening with dirt. As soon as this is done,

Clyde, B. (Male)

EARLY TO LATE. Bisexual. In point of prolificness, beauty of form and general excellence the Clyde ranks high among varieties of its season. The berry is large, conical in shape, one side being a bright crimson and the other a deep cream blending into a delicate pink. The fruit is regular in form and even as to season, and the sorting of the berries of this variety is a very easy task indeed. Seeds are deeply imbedded, seldom coming even with the outer edge. The flesh is a rich pink of delicate flavor and fine texture, and the Clyde is famous for retaining its flavor when canned. As a shipper it is one of the leaders and is, in consequence, very popular among commercial growers. Another strong point is the fact that it has a long fruiting season, frequently extending from extremely early to very late, and yields fine fruit up to the final picking. This is the sixteenth year we have had Clyde on our farm.

throw a wet blanket over the hill to keep down the carbon bisulphide fumes, so as to increase their efficiency in suffocating the ants. Do not remove the blanket for at least an hour. If the hill is large, it will be advisable to make two of these holes, ten inches or a foot apart.

But prevention is better than cure, and the way to prevent the root louse from destroying your plants is to dip the latter, just before setting them, in tobacco tea made by boiling one pound of tobacco stems in five gallons of water for twenty minutes. Let the tea cool, after which dip the roots clear up to the crown, and the odor of the tobacco, so offensive to insects, will keep away the pests. (See Page 19.)

Customer for 25 Years.—This is the silver anniversary of the R. M. Kellogg Co. It is peculiarly gratifying, therefore, to receive such a letter as the following from one who has been a loyal customer from the very beginning:

Osborn, Mo., July 28, 1909. "I have to ask again for a catalog. I gave the one you sent me away to a friend of mine and told him about your plants, that I had sent to you for twenty-five

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

Bederwood, B. (Male)

MEDIUM EARLY. Bisexual. Bederwood is another of our old favorites that steadily grows in popularity. This is the twenty-third year we have selected and tested this variety on our farm, and our confidence in it has grown with the years. Bederwood grows a medium-sized berry, delicate crimson in color, with a glossy surface in which are imbedded deep yellow seeds. The flesh of the berry is red and shades down to a rich cream near the center. Its delicious flavor and high color make it especially attractive with high-class trade, while as a table berry it stands unexcelled. To these qualities is added that of being an excellent canner. The calyx is small, lying close to the fruit and it is one of the daintiest in appearance of any berry grown. As a producer it ranks very high. It is famous for its long blooming season and its great strength as a fertilizer of pistillate varieties.

years for my strawberry plants and always have found them O. K. I always say a good word for you."

C. A. LEAPER.

The Number of Plants Required

MANY of our friends write to ask how many plants are required to set their particular "patches", and our mathematician has worked out a simple formula by which anyone may calculate for himself the number of plants required, no matter what the size of the patch or the space allowed between the plants. The formula is as follows:

To find the number of plants required for a given area, divide the length of the plot by the distance between the plants in the row, and multiply this number by the width, divided by the distance between the rows. For example: A plot of ground 50 feet long by 30 feet wide, with plants set 2 feet apart in the row, and rows 3 feet apart will require

$$(50 \div 2) \times (30 \div 3) = 250 \text{ plants.}$$

An ideal distance for the home garden, where all cultivation is done with the hoe, is rows 30 inches apart and plants 24 inches apart in the row. This plan requires 13,150 plants to an acre.

The distance for plants set by the hill method where the patch is so large as to call for cultivation with a horse, is 30x12. Under this system it requires 17,625 plants to an acre.

As different growers prefer their own combinations in arranging fields, we give herewith

Crescent, P. (Female)

MEDIUM EARLY. Pistillate. It is just a quarter of a century since we began the propagation of the Crescent, and after twenty-five seasons' experience with this great pistillate variety, our admiration for it is more pronounced than ever before. In size the berries are medium and they are of a rather broad wedge-shape, tapering to an obtuse point. The flesh is close-grained and solid, making it an ideal shipper. Crimson in color, the bright yellow seeds, shading up to brown on the darker side and standing out prominently, combine to create a beautiful effect. The flesh of the berry is a rich red around the edges shading down to a lighter color as it approaches the center. The fruit is very juicy and of a deliciously tart flavor. As a canner it is among the most popular of all varieties, and as a market berry it has few superiors. Its extraordinary yield of fine fruit makes it especially popular among commercial growers. In every respect it is an ideal berry.

various arrangements of space with the number of plants required for an acre when set by any one of them:

Rows 30 inches apart and 24 inches in the row,	8,700
Rows 30 inches apart and 30 inches in the row,	6,975
Rows 34 inches apart and 30 inches in the row,	6,150
Rows 36 inches apart and 30 inches in the row,	5,800
Rows 36 inches apart and 24 inches in the row,	7,275
Rows 42 inches apart and 24 inches in the row,	6,225
Rows 42 inches apart and 20 inches in the row,	7,475
Rows 48 inches apart and 20 inches in the row,	6,525
Rows 48 inches apart and 30 inches in the row,	4,400

Thoroughbreds Support the Widow and Orphans.—A striking example of the strawberry as a means of support to the widowed mother comes to us just as we are closing up the forms for this book. J. A. Matty, No 27 Audubon Ave., New York City, under date of August 18, 1909, says: "Some four years ago I advised Mr. Gustave Engstrom of _____, N. J., to purchase some of your plants; in fact, I ordered them for him and showed him how to plant them and propagate, using the single-hedge-row system. I left there shortly after that, and last February I was speaking to Mr. Gilbert of Philadelphia, Pa., who sold them their tract of five acres of scrub oak and pine and, to my deep regret, he told me that Mr. Engstrom was dead, but that the farm was paid for and Mrs. Engstrom was getting a good living from her strawberry beds which had been in-

Buster, P. (Female)

MEDIUM TO LATE. Pistillate. This variety is particularly famous for its immunity from frost. Where it has been grown and where the bloom of some other varieties was completely destroyed, Buster has given a full crop. It, therefore, gives promise of great success in northern latitudes where late spring frosts are common. It is a cross between Bubach and Sharpless. In size it is large and in color a bright red; the flesh is moderately firm and of medium quality. Those who admire the Bubach variety will find many of the characteristics of the parent in this worthy scion. The plant makes a very vigorous growth and the name "Buster" was given to it because it has broken all records for yield wherever grown. For vigor of growth and reliability under adverse conditions Buster takes first rank, and we highly recommend it to our customers.

creased very largely and, in addition, was supporting four bright children. Mr. Gilbert said they were the finest strawberries he ever saw in his life, and he has seen thousands of acres in Southern States."

Thoroughbreds After Two Months of Drought.—Referring to the accompanying illustration, Francis Ball, superintendent of the extensive fruit

and vegetable gardens of W. W. Harrison, at Glenside, Pa., in sending the photograph says: "This strawberry patch was planted this spring (1909) from 2600 of your Pedigree plants. The picture was taken August 7, after two months

Splendid, B. (Male)

EARLY TO LATE. Bisexual. The word splendid fittingly characterizes this variety, for in every particular it is indeed a noble berry. Large of size, almost round in shape, bright red in color, it is difficult to conceive of a berry that is more attractive when placed upon the market in neat packages. The seeds are of nearly the same color as the fruit. The berry is meaty, smooth, and in flavor delicious. The interior colors are particularly marked—around the edges it is bright red, and this extends about one-third of the way to the center; but from this point to the center the flesh is a creamy white. The calyx is small, bright green and spreads well over the top of the berry. The foliage is of a spreading nature, dark and glossy green in color and has a long leaf with a polished surface. Splendid is a fine mate for pistillate varieties, having a long flowering season with every bloom full of pollen. This is the eleventh year we have bred this variety.

of the severest drought ever known in this section. Shade trees died, and alfalfa in the same field was burned up." The beautiful field is another testimony to the vitality of Kellogg plants.

Plants that are Universally Successful

KELLOGG THOROUGHBREDS flourish and thrive everywhere, in all sorts of soils and under all conditions of climate. From the hot sands of the Gulf of Mexico to the northern prairies of Saskatchewan, our customers tell us of the wonderful successes they are achieving with our plants. For the benefit of others we quote here brief extracts from some of the great numbers of letters we receive from those who, with gratitude and good-will in their hearts, have written us of their experiences; and these letters we have arranged by states and provinces in alphabetical order:

Alabama

Hines, April 22, 1909. "The 1225 plants were received April 17. They seemed a little wilted but were not a bit hot. They were at once heeled in and have started to grow quicker and stronger than any plants I ever handled and I

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

Lady Thompson, B. (Male)

EARLY TO LATE. Bisexual. In color the Lady Thompson is a bright-red berry; in shape, almost like a top, tapering to an obtuse point—the ideal strawberry form. In size the fruit is medium large; the seeds are red and aid to produce a fine glossy effect. The meat is solid, pink in color and delicately rich in flavor. The foliage is tall, grows upright and has light-green leaves. The double calyx opens closely over the berry and adds not a little to the pleasing effect. Long fruit stems stand very erect, holding the berries up from the ground. This variety roots deeply and thrives under conditions of severe drought. Runners are long and numerous. This is the ninth year we have bred this variety, and we can with more certainty than ever advise our customers to make this variety one of their selections.

Ridgeway, B. (Male)

MEDIUM TO LATE. Bisexual. The Ridgeway is unique as to form, being almost round and very smooth. The seeds are imbedded just deeply enough in the flesh to leave an unbroken surface, and the combination is one that makes a berry of peculiar beauty. This beauty is in no way lessened when the fruit is cut open, as the interior of the berry is most tempting. The meat is scarlet with an oblong ring around the heart, which is almost white. The variety has a small calyx which clings to the fruit several days after picking. The foliage is tall and has dark-green leaves, and this variety grows very large runners, which extend some distance before forming the nodes for new plants. This is the thirteenth year of Ridgeway under our particular methods of breeding and selection, and the popularity which has so steadily increased during all these years is due to the merits of an exceptionally noble fruit.

have been at the business sixty-one years. Thanks! The 500 plants consisting of ten varieties I received from you a year ago promise very high. They are now in full bloom.”

J. M. ALLEN.

Arizona

Yuma, May 5, 1909. “Your plants arrived here about ten days ago and I must say I never saw plants with such roots.”

J. J. TODD.

Arkansas

Siloam Springs, May 1, 1909. “The 2400 plants after being on the road five days arrived fresh and nice. Don’t think I will lose more than twenty-five plants. The Longfellows are ‘birds’, and the finest I have ever seen.”

W. H. RAGAN.

California

Sacramento, May 3, 1909. “Strawberry plants received in fine condition. Not one lost in the entire shipment.”

E. EDLING.

Auburn, May 3, 1909. “I received my plants this afternoon all O. K. They are set out and are looking fine. I appreciate your promptness in delivery; also receiving plants in such fine condition after traveling such a distance.”

W. S. WILKINS.

Santa Barbara, May 6, 1909. “I am greatly pleased with the plants you sent me recently.

I wish to thank you for the prompt attention given.”

MRS. ELLA K. SNOW.

Aukum, April 30, 1909. “Would just say that the vitality of the Kellogg plants is truly wonderful. One can almost see them grow from day to day.”

MRS. A. E. DE STEBBAN.

Acampo, April 28. “I have been wanting to tell you for a long time how fine your berries grew here; they are far ahead of any berries I ever saw, and are such large, fine fellows.”

MRS. JAS. R. LAY.

Coulterville, April 22, 1909. “We received the strawberry plants April 15 in the morning, and by 3 p. m. we had them all pruned and set. They have now been out just a week and all are looking fine.”

MRS. HARRY CAMERON.

Colorado

Elco, April 26, 1909. “Strawberry plants arrived safely and in good condition. Many thanks.”

MRS. J. O. SMITH.

Boulder, April 26, 1909. “I have just received the 600 plants in good condition.”

ADELINE E. ASHTON.

Connecticut

Forestville, June 1, 1909. “Received the strawberry plants in very nice order. I thank

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

Haverland, P. (Female)

MEDIUM. Pistillate. We have propagated this remarkable variety for twenty years and its performance during all of that long period has won for it not only our confidence, but the confidence of customers in every section of the land. The berry is large and long, tapering to an obtuse point. In color it is bright crimson on the sunny side, shading to a light red on the other side. The seeds are bright yellow and just sufficiently prominent to increase the fine appearance of the berry over which the calyx gracefully falls. It is one of the most beautiful and tempting varieties grown. The foliage is tall, of spreading habit, with a long dark leaf. Strong, vigorous plants and large crops of fruit under all conditions of soil and climate, characterize this variety. It easily ranks among the greatest of the pistillates.

Senator Dunlap, B. (Male)

MEDIUM TO LATE. Bisexual. This variety has won a most unusual and honorable distinction in every section of North America; indeed, it may be said that wherever strawberries are grown the Dunlap is a prime favorite. The fruit is large and, as the illustration indicates, is finely formed. Its color is a rich dark-red with glossy finish, shading to deep scarlet on the under side, in which are set with prominence bright yellow seeds that look like gold imbedded in a rich-hued wax. There is but little variation in the form of the fruit, which is an element of popularity, and it is one of the greatest yielders ever known. The flesh is bright red, exceedingly juicy and of delicate flavor. Its flowering season is very long and it is one of the strongest of pollenizers. This is the twelfth year we have bred our strain of Dunlaps, and we rank it among the very best varieties known.

you very much for the care they had. They are doing nicely now."

E. G. TERRY.

Waterford, March 17, 1909. "I gave you an order two years ago for 1000 plants, and I now thank you for the best strawberry plants that I ever saw (and I am a strawberry fiend). I only wish you could have seen them in fruit. People came miles to see them. New England suffered one of the most severe droughts in history, but those plants stood up to their business and never wilted."

ANDREW J. PHILLIPS.

District of Columbia

Washington, May 19, 1909. "Your strawberry plants received April 8. I have planted them out; they are doing finely. I think they will continue to do well from now on."

W. T. BURDETTE.

Washington, January 31. "The berries that grew from the plants that I procured from you were the finest that were seen in this section of the country."

M. A. McCORMICK.

Florida

Plant City, Dec. 5, 1908. "The plants I purchased of you last spring were simply fine. They arrived in good order and notwithstanding the

long-continued drought made plants enough to set about one acre. They are the finest plants and the fullest of berries we have ever had. We have had plants from five different nurseries and yours are far in the lead. I shall at all times do all I can in favor of your business, for your plants excel any I have ever tried. The Nick Ohmer grows the largest berries I have ever seen—required just two layers to fill and dress a one-quart cup; generally five berries in the bottom and nine on top."

H. A. SLOAN.

Brooklyn, Jan. 13, 1909. "Let me say your pictures in your catalog are not big enough. We had some thoroughbred Brandywines today that covered your picture all out of sight, and the best growing season is not here yet."

JOSEPH BOLT.

Idaho

Kootenai, April 23, 1909. "Plants received all O. K. I expect to want more next spring."

W. S. GALUSHA.

Fletcher, June 6, 1909. "My two thousand and fifty plants which you shipped to me April 9, 1909, are all growing nicely. They are perfect

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

Miller, B. (Male)

MEDIUM TO LATE. Bisexual. It would be difficult to conceive of a more beautiful berry than the Miller, as a glance at the illustration above will indicate. The form can be seen, but the dark-red color, which gives to this fruit a peculiar charm, can only be appreciated when the fruit itself is seen. Beautiful in form and color as it is, its rich flavor fully equals its other qualities. The meat is of a smooth, melting texture, exceedingly juicy, rich and sweet. In productiveness the Miller stands among the leaders for home use and family trade. It is rather too delicate for long-distance shipping. This is the eighth year we have had Miller under selection and restriction, and without doubt our strain of Miller plants stands unequalled. The Miller is not particular as to soils, but succeeds wherever grown. The foliage is distinct from that of all other varieties. In color it is a light green, it has extra-large, coarse leaves and grows exceptionally tall. Do not fail to order some of this variety.

Enormous, P. (Female)

MEDIUM TO LATE. Pistillate. As its name indicates this variety grows an enormous berry, and the big red fellows grow so thickly that the vines are a mass of red. The illustration above is that of a typical Enormous berry, with its broad wedge-like shape. In color the berry is crimson, in which are imbedded dark yellow seeds. The flavor of Enormous equals in excellence the size of the berry, and the meat is juicy and rich. It is unusually popular in all markets for the family trade. This is the fifteenth year we have bred this great variety, and the best test of its high value is its increasing popularity with those who have grown it longest. The calyx is light green and lies flat on the berry, and the stem remains fresh long after the berries are picked, thus aiding it to retain an attractive appearance long after the fruit has reached the market.

destroyed, but they came again and bore a big yield. I have always been pleased with plants bought of you." J. L. DILLMON.

Champaign, April 30, 1909. "Strawberry plants came O. K. I thank you for the splendid plants." MRS. ELIZABETH BARTO.

Indiana

Spencer, Feb. 5, 1909. "I bought plants of you last spring—Bederwoods, Belts and Dornans—and notwithstanding the severe drought I lost only a small percentage of them. I am an enthusiastic advocate of your Thoroughbred system. No need for me to wish you success—you have already arrived!" W. S. COFFEY.

Dana, Feb. 8, 1909. "I attribute my success in the business of strawberry growing to the use of Kellogg's thoroughbred plants. I have been using them for fifteen years and have invariably had a paying crop. The plants are so strong and vigorous that it is no trouble to get them to grow." J. O. STAATS.

Pleasant Lake, April 3, 1909. "I ordered plants of you last spring for one acre, and I now feel safe in saying that we have as fine, if not the

beauties. The dibble is simply indispensable." J. J. PEDIGO.

Illinois

East Moline, May 7, 1909. "I received my plants on the 4th inst. in fine form and will want three thousand more next spring."

HARRY HINCHER.

Plymouth, April 29, 1909. "Your plants are the finest I ever saw, so you may expect some more orders from me in the future."

GLENN C. HUEY.

Aurora, April 28, 1909. "I am pleased with your plants. I don't want plants from anyone else." ELIZABETH A. HARRIS.

Willow Hill, Feb. 1, 1909. "I sold in 1908 from the 4500 plants bought of you in the spring of 1907, one hundred and seventy-seven dollars and thirty-five cents worth, after a freeze seemingly had destroyed the patch. Out of a cluster of bloom of eighty-four buds eighty-two were

Thompson's No. 2, B. (Male)

MEDIUM EARLY. Bisexual. We have had this variety under our methods of selection and restriction for five years, and we see new points of excellence in it every season. Its berries are bright red and they are produced in great quantities. Rich in flavor, high in color and notable as shippers, the berries of this variety never fail to command the good-will of growers everywhere. Added to these qualities is the fact that this variety is strong as a pollinizer. Here we have a combination of excellencies that will make any variety popular. The shape of the berry is globular, and when packed in the box presents a most attractive appearance. The skin is not readily broken, and the fruit holds its color long after being picked. The foliage is a glossy dark green and has a tissue so tough that it makes a strong resistance to all leaf spots, making this variety peculiarly immune to rust, blight or mildew.

Beidler, P. (Female)

MEDIUM EARLY. Pistillate. One of the truly great pistillates that have commanded notice during recent years. Its beauty instantly attracts the attention of the buyer on the market and its large size, its bright-red color and rich flavor create a permanent market for it. The fruit is solid in texture and possesses all the points of the ideal shipping berry. This combination of qualities has won for this variety great popularity among commercial growers of strawberries everywhere, and we enter upon the fifth year of the propagation of this variety with increased confidence in its great value. The foliage is large, tall and vigorous; the fruit stems are unusually powerful and hold the fruit well off the ground, keeping the berries bright and clean. When set with Thompson's No. 2 the combination is a perfect one. We can recommend our patrons without reserve to give Beidler and its mate an extensive test.

finest, acre of plants in Indiana. The way your thoroughbreds went through the dry weather was something wonderful."

ORLA HUFFMAN.

Delphi, Jan. 8, 1909. "I have bought plants of you heretofore and they proved to deliver the goods at fruiting time, and I am leading the market. But in order to continue in the lead I must depend on good plants from you to restock my acreage."

M. N. SIBERT.

Goodland, May 17, 1909. "My 500 plants came two days after they were expressed. I heeled them in and it was two weeks before I could set them out properly, but out of the 500 I lost only one plant. All the others are growing finely, and they are a lovely sight to look at this early after planting."

DR. M. L. HUNSTON.

Iowa

LeMars, April 9, 1909. "I sold one hundred and eighteen dollars' worth of berries last year from a quarter of an acre of your plants. They were fine!"

R. HENRY.

Red Oak, April 28, 1909. "I have been growing strawberries for several years, getting plants of near-by nurseries and from my own growing. But when I saw those Kellogg thoroughbreds growing I was struck with amazement; those tremendous roots and the very large stem, and

in all, that sturdy, rugged plant life which denotes persistence and growing power! I don't wonder that those strong well-developed plants produce the big yield claimed for them!"

O. E. McCABE.

Thurman, April 21, 1909. "I have handled a great many strawberries, but from no other nurserymen have I ever received such good and helpful advice as you have sent me. It does me good to have instructions from the right one."

J. H. HAMMOND.

Rockford, July 15. "I have had the finest kind of a crop of strawberries from my Kellogg thoroughbreds. Varieties were Haverland, Warfield, Senator Dunlap, New York and Brandywine."

CHAS. HOWELL.

Kansas

White Cloud, Feb. 22. "Three years ago we sent to you for strawberry plants, and last year they were the wonder of everybody who saw them. My bed was 39 by 20 feet and I picked 265 boxes, not saying anything about what were picked and eaten."

WILLIAM DRUMM.

Which, by the way, was at the rate of 10,600 quarts to the acre.

Fredonia, March 31, 1909. "One year ago this spring I ordered close to 400 plants from

Wm. Belt, B. (Male)

MEDIUM TO LATE. Bisexual. Every year adds to the popularity of this splendid staminate. While it is not partial to any particular climate, the Wm. Belt, when set with Glen Mary, has won many firm advocates throughout the Northern and Pacific Coast states and Canada. These two varieties make an ideal team in all soils and under all conditions of climate. The Belt produces a berry of great beauty and large size. In color it is bright red from surface to center. The meat is rich and juicy and it is a great favorite for table purposes. The yellow seeds make a fine contrast set in the bright red surface, the combination producing a glossy and most attractive effect. The Belt is an ideal pollenizer and has a long blooming season. The berry is somewhat varied in form, but the above illustration represents what may be called a typical Wm. Belt. This is the fourteenth year of this variety in our breeding beds. The calyx is small for so large a berry, and the foliage is unusually tall and light-green in color.

you and they were certainly fine this spring, and were one of the main features in selling our place.”

MRS. L. CHAPMAN.

Eldorado, April 23, 1909. Please send me another copy of your catalogue of 1909. I let a neighbor take mine who is sending you an order for plants. I received my order of 1,000 plants promptly; they were in good condition, and I am proud of them. I need the catalogue to study cultural directions.

MRS. S. E. SNYDER.

Kentucky

Fulton, April 14, 1909. “Plants received in fine condition. Have them heeled in as ground is too wet to set. Please accept my thanks.”

T. E. BRADY.

Henderson, April 14, 1909. “The plants have arrived all O. K. and they are fine ones.”

GEO. W. WEED.

North Pleasureville, March 30, 1909. “Am

Glen Mary, B. (Male)

MEDIUM. Bisexual. One of the exceptionally valuable medium varieties whose friends and admirers increase in number with the passing years, as shown by the constantly increasing demand for it. The berries are very large, dark-red, with prominent seeds of bright yellow, and at fruiting time they lie heaped up in windrows around the plants. In quality they are as remarkable as they are for the great quantities produced, and once a consumer has tasted of the rich, high-flavored and juicy fruit, he never ceases to call for the Glen Mary. It is as fine for canning and preserving purposes as it is for table use, and as a shipper it is unexcelled. These qualities have made it a prime favorite with extensive growers who ship long distances as well as for the family garden. It is especially valuable in climates of limited rain-fall, having an extraordinary root system. Although a bisexual, the Glen Mary is not strong as a pollenizer and we advise always that it be planted near some other bisexual of even season. Wm. Belt and Glen Mary make an ideal team. This is the thirteenth year Glen Mary has been propagated upon our farms.

late in getting in my order, but I must have some Kellogg plants. None others equal them in this world.”

DR. C. F. DUDLEY.

Louisiana

Homer, April 17, 1909. “Received the strawberry plants on the 12th inst. and set them out at once. I think Marshall grew one inch the first night. Don’t believe there is one plant out of the 200 that will fail to grow. Many thanks.”

J. A. AUBREY.

Lenoir, Feb. 25, 1909. “I want you to send me some more of your strawberry plants. The other ones I ordered from you surely were fine! All who saw them said they were the finest berries they ever saw, and the finest plants. Everybody got plants from me around where I

Parsons' Beauty, B. (Male)

MEDIUM. Bisexual. One of the great yielders of an exceptionally fine quality of fruit. The berries are bright red and are of mild and delicious flavor, which is retained after cooking. These qualities have made Parsons' Beauty very popular both in the home and among commercial strawberry growers everywhere. Attractive in appearance, it holds the good opinion of the consumer after it has been tested upon the table. One feature of its appearance is most attractive, and that is the prominence with which the seeds stand out upon the bright-red surface of the fruit. It grows with high success in all soils and climates, and the record it has made in the eight years it has been upon our farms leads us to recommend it to all commercial growers, as well as for the family garden. The calyx is very heavy and bushy. The foliage is upright and has a long, dark-green, leathery leaf. Parsons' Beauty is exceptionally strong as a pollinizer.

Klondike, B. (Male)

MEDIUM. Bisexual. Growers of this variety are always enthusiastic about it and declare it is well named, as it has proved a veritable gold mine in the case of so many of them. Uniform in shape, of a beautiful rich blood-red color which extends from center to circumference, this variety presents such an appearance when put upon the market as to win instant admiration and sale. In flavor it is neither sweet nor sour, but is deliciously mild and unlike any other variety with which we are familiar; and it is exceedingly rich in juice. Foliage is light green, tall and compact, with medium-sized leaves. The calyx is small and curls back toward the stem. Runners form abundantly and plants grow large and develop an unusual number of crowns. The yields of this variety are something wonderful. This is the eighth year we have propagated Klondike, and our confidence in it has become so great that we heartily advise every customer to take an abundant number of the Klondike plants.

lived. They had ripe berries from March until August."

MRS. LUCY HUGHES.

Maryland

Glen Burnie, April 17, 1909. "The five hundred Pride of Michigan arrived O. K. today."

ADAM WENGERT.

Hagerstown, Jan. 16, 1909. "I received your 1909 'Great Crops of Strawberries,' with which I am very much pleased as it gives me just the information I need. I thank you for sending it. Last spring I made my first venture with strawberries, and have followed your instructions with excellent results so far. People who visited my plants tell me they are the finest plants they ever have seen."

HARRY S. CLOPPER.

Massachusetts

North Adams, May 7, 1909. "I was very much pleased with the plants; they had plenty of roots. I have set them out in excellent soil and will try

and give them good attention as I know it depends on me now how they do."

CHAS. H. BODINE.

Norfolk, Mass. "In the spring of 1907 I purchased 500 New York strawberry plants from you. They were fine plants and grew nicely. I cultivated them in hills and they were the admiration of all who saw them. I picked and sold 400 quarts besides what we ate on the table and canned, which was not less than 100 quarts more. I thought the cuts in your catalog a little exaggerated, but you will have to enlarge the New York cut, for I beat it considerably. All who saw them said they never saw such berries before. They were great."

W. R. MILLER.

Michigan

Union City, Dec. 30, 1908. "The 2000 plants I bought of you last spring I am very much pleased with and I shall want some more the

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

Clark's Seedling, B. (Male)

MEDIUM EARLY. Bisexual. Our Pacific Coast customers find this variety to be of especial value for commercial purposes and take the plants by many thousands; and wherever Clark's Seedling is grown it always brings high prices. We are confident that every grower who tries it out will be greatly pleased with results. It is a handsome berry and its color is peculiarly attractive. The form is well shown in the illustration above, but it is not so easy to tell of the attractiveness of the fruit, because its deep, rich-red color, which extends clear to the center, adds so much to its beauty. As a canner it is famous and its shipping qualities have been tested as have those of few varieties. It has been shipped from the Hood River country to St. Paul, Minnesota, in large quantities and with great success. The foliage is medium large, dark green in color, and the variety makes very strong runners. This is the fifth year of its selection and restriction in our breeding beds, and the more we see of this splendid variety the greater is our confidence in it.

Arizona, B. (Male)

MEDIUM EARLY. Bisexual. This variety has won and holds the admiration of growers wherever it has been seen. It is a variety which, under favorable circumstances, yields a second crop in the fall of the year in many latitudes and comes as near being the ideal "double cropper" as anything we know. The spring crop from this variety is remarkable for its size and quality, something that seldom occurs in the case of the so-called "ever-bearing" varieties; therefore, whether it yields a double crop or not all should give this variety a good opportunity to prove its high value. Arizona is a producer of large-sized deep-red berries, which have a fine aromatic flavor. The foliage is dark green and of medium size. This is the eighth year we have grown this variety in our breeding beds and we have taken great care to propagate only from mother plants which show a strong double-cropping habit; therefore, we confidently expect this characteristic to become more pronounced with each passing season.

UNDEVELOPED EAR
Result of Poor Seed

YOU can get seed from a weakened strain of corn like this for about 50 cents a bushel, and it is mighty costly at that. If it is cheap seed you want, buy this kind; but if it is a good crop of big ears of corn you are after buy the \$5 kind. Corn is corn, and strawberry plants are strawberry plants, but there is a big difference at harvest time.

WORLD'S CHAMPION EAR
Sold for \$150. Result of Breeding

SEED from a strain of pedigree corn like this will cost you \$5 per bushel and is the cheapest seed you can buy.

coming spring. I sometimes buy plants of different firms. The plants all look alike, but the other fellow's plants don't yield the fruit that your plants do. I have five acres of strawberries and still I would like to have some more of your varieties."

ERNEST WIEHL.

Canton, Feb. 9, 1909. "Your plants are all right. I have a lot of plants of my own, but will not plant very many of them. The Thoroughbreds are the cheapest in the end."

W. L. SUGGITT.

Cadmus, Jan. 22, 1909. "This is my third year ordering plants from you, and I know I shall never buy plants of anyone else, for they are O. K. Never got any from any other firm that were even half as good."

LAURA BAILEY.

Sebewaing, Mich., Aug. 4, 1909. "From the plants I purchased of you a year ago last spring we started to pick berries June 19 and continued four weeks. We sold 1450 quarts besides what we used for table and canning, which amounts

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

New York, B. (Male)

MEDIUM TO LATE. Bisexual. In color the New York is bright blood-red with shiny surface, and has seeds of nearly the same color and so deeply imbedded are they as to be almost invisible. The shape of the berry varies, ranging from the top-shaped with a long point to the thick and broad form. In size the New York is very large, which gives to it always a leading place in the market. In flavor it is delicately mild, and the meat is of smooth texture. The word "fancy" exactly describes the New York, and it is this quality, to which is added a most delicious flavor, that has won for this variety a popularity which grows more pronounced every season. It yields prolifically and has a long ripening season, and it is the universal experience of growers that it is one of the most profitable of varieties. We have had New York under our methods for ten years, and heartily recommend our customers to add some of this variety to their lists.

to \$140 from 1500 plants. The plants I purchased of you last spring (1909) are doing fine."

J. C. ARMBRUSTER.

Minnesota

Duluth, Feb. 24, 1909. "I send you a word regarding my success in growing strawberries from your Pedigree plants. I have only a small garden patch, but I picked from it four bushels of nice, large, juicy berries. Some of them measured six and one-half inches in circumference. Some of the berries were exhibited at the Minnesota State Fair. They were put in large glass jars containing alcohol. I am quite gratified by the generous commendations received."

WILSON PALMER.

Gladstone, Feb. 19, 1909. "I have been dealing with you for the past four years, and your plants are the best I ever saw and can recommend them to anybody." WM. BRUENTRUP.

Mississippi

Oxford, May 3. "The strawberry plants were received all right and they are now growing nice-

Nick Ohmer, B. (Male)

MEDIUM TO LATE. Bisexual. For twelve years we have bred Nick Ohmer, and we can say without hesitation that its fame and popularity have been honestly won. It is noted wherever grown for its unusually rich flavor, great size, firm flesh and beautiful rich crimson color. A large portion of the seeds are brown, but between them are yellow seeds and these, with the rich red of the berry, make a combination of unusual attractiveness, which is increased by the fine calyx that surmounts the berry. The foliage grows tall and has a dark-green leaf, somewhat crinkled. The fruit-stems are long and stand up over the foliage, making easy work for the pickers. The bloom is large and very rich in pollen. This remarkable combination of excellent points has led many of the largest commercial growers of fancy fruit to make Nick Ohmer their leader.

ly. We are very proud of them and all parties are well satisfied. I think you will receive more orders from here next spring."

MRS. J. M. SANDERS.

Missouri

Iberia, June 24, 1909. "I bought 100 Stevens' Late Champion from you last spring and this spring picked an immense crop of berries from them."

CLIFF H. CLARK.

St. Charles, May 10, 1909. "Your plants shipped on the 15th of April arrived on the 17th in the best of order. Planted on the same day and have not lost a plant. Some of my friends have seen my plants and everyone thinks the plants are just fine. The goods are just as they were represented to be."

EHRHARD KUECHLER.

Springfield, April 17, 1909. "Plants received in No. 1 condition Thank you very much."

LEROY C. DAVIDSON.

Montana

Red Lodge, May 9, 1909. "Plants came promptly and am well pleased with them. They are all

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

Downing's Bride, P. (Female)

MEDIUM TO LATE. Pistillate. The fruit of this variety is dark blood red in color which extends quite to the center, with only enough white at the very heart to make an attractive contrast. The seeds are golden and shine as if burnished. This variety produces large quantities of most attractive fruit, and its beautiful appearance and delicious flavor make it universally popular. One of its noteworthy advantages is the fact that the berries remain on the vines in fine condition for many days after becoming fully ripe, and they also retain their freshness for a long time after picking. It is one of the universal favorites that make a fine record wherever grown. We have been working with this variety for eight years, and its performance each season serves to increase our confidence in it as a perfectly reliable variety in every respect.

Mark Hanna, P. (Female)

MEDIUM TO LATE. Pistillate. Each succeeding year serves only to add to our admiration for this extraordinary pistillate variety, and we are confident that every customer who will give Mark Hanna a fair trial will find that it comes as near their ideal as any variety ever originated. In color it is a beautiful bright red, and is made strikingly attractive by its sparkling yellow seeds and light-green calyx. Its flesh is scarlet, solid of texture and rich in flavor. The productive powers of this variety give it high place among the prize winners, and the size of the fruit is something quite exceptional. The foliage grows tall, drooping over each side of the row and spreading apart in the middle of the row; this allows the great quantities of berries free access to the sun's rays, and thus the berries are all colored up evenly. This is the seventh year we have carefully selected and restricted this great variety.

doing finely and are the best plants I ever saw. You may consider me a regular customer when I need plants."

J. H. HYATT.

Big Fork, Aug. 8, 1909. "The plants we got from you two years ago are the finest I ever saw, and I have other plants of yours set out the middle of May last that will measure two feet across. My last year's plants grew berries that measured $7\frac{1}{4}$ inches around. I hope you will keep on raising the same kind of plants."

B. T. ZACHARY.

Nebraska

Danbury, May 5, 1909. "Have used your plants before this, and would not have others if offered at half the price." MRS. W. J. STILGEBONER.

Kearney, Nov. 9, 1908. "Last spring I ordered four hundred plants from you, and I never saw anything do better. Lost only four plants."

E. H. MOREY.

Florence, April 15, 1909. "We received the plants as ordered, and found them all in good

shape. They were all in excellent condition, and I am especially pleased with the way you pack your plants."

J. A. JOHANSEN.

Nevada

Carson City, Feb. 20. "Two years ago I sent for 350 of your Thoroughbred plants and set them out according to your instructions. Last season I was paid for the work I put on them as I had a fine crop of berries. I got 20 cents a box all through the season. One of our local papers published the following regarding the berries I grew from your plants: 'Will Nevada raise strawberries? Take a look at those great, luscious strawberries displayed in the window at the Walsh store and you will receive the answer. The berries are large, very large, three or four filling a pint measure; yet the fruit is juicy, sweet and highly delicious. The berries were raised by Ed. Muller at his home in the southwestern part of the city. Mr. Muller has four

Challenge, B. (Male)

MEDIUM. Bisexual. Among growers who produce strawberries especially for the family trade Challenge is very popular. The berry grows extra large but is not so uniform in shape and as smooth as are many of our varieties. Its delicious flavor, its fine color and large size, however, have made it universally popular wherever it has been grown and sold. In form the Challenge is round and corrugated; rich dark red in color, the brown seeds in its sides look as if they had been polished. There is no more tempting strawberry shown in the market than the Challenge when it is properly packed in the box. The flesh is an especially deep crimson and is very rich and solid, that rare quality making it valuable as a shipper. Challenge is a variety that is universally successful, thriving under all conditions of climate and soils. As a yielder of great crops few varieties excel it. This is the eighth year of selection and restriction in our breeding beds.

hundred of the berry plants and yesterday picked seven gallons of the fruit.'"

EDWARD V. MULLER.

New Hampshire

Canaan Center, April 4, 1909. "Plants arrived all right and in first-class condition. Am well pleased."

C. W. NEILY.

Belmont, July 5, 1909. "I have bought plants from other growers to test besides yours, and I want my foundation plants to come from you. I expect to send to you next spring for plants for my propagating bed, as your plants are the best fruiter I have found, although other plants looked better in many cases up to fruiting time, and I would be well satisfied with them if I had not had yours to compare them with."

FRANCIS A. BADGER.

New Jersey

West Collingswood, April 27, 1909. "Plants received today in splendid shape."

RICHARD N. GROVES.

Camden, April 22, 1909. "Your shipment of

Bubach, P. (Female)

LATE. Pistillate. Noted for its immense yields of fruit of great size and beautiful in color, Bubach has won a reputation as a money maker enjoyed by few varieties. It is the universally favorite pistillate and is one of the varieties we have found it difficult in the past to supply in sufficient number to satisfy the increasing demand. We are producing a million or more of them this year so that all our patrons may be supplied with as many of them as they call for. The berries are big, meaty fellows with a bright-red, waxy surface. Some are conical in shape and others are wedge-shaped. The bright red color extends through the fruit, which is fine grained. It has a large calyx with medium-sized stems. The foliage is dark green and of spreading habit, with short fruit and leaf stems. It succeeds in all kinds of soil and in every climate. This is the twenty-third year we have propagated this popular pistillate variety.

strawberry plants reached me in due time—April 16th—all in good condition."

A. B. AYRES.

Trenton, April 19, 1909. "I received your plants Friday. They were all in fine condition."

GEO. GETZ.

New York

Constantia, Feb. 16, 1909. "Kellogg Pedigree plants are the best to get. I know, because I have tested them by setting six rows of plants that were not pedigree, although they were nice large-rooted plants. I gave them just as good care and cultivated them as I did the Kellogg pedigree plants, but they did not have the power to stand the long dry weather like the pedigree plants. I have quit trying to raise strawberries any other way than the Kellogg way."

ALVIN FREDAY.

Keesville in the Adirondacks, May 15, 1909. "Plants received in fine condition. It is a pleasure to deal with people who know how to pack plants, and without any exception the plants re-

Chesapeake, B. (Male)

Sample, P. (Female)

LATE. Bisexual. We take especial pleasure in adding to our list of varieties this season the Chesapeake, which in all sections where it has been grown for several seasons ranks among the best of the late varieties. One enthusiastic Eastern grower wrote us that he considered it the best variety ever grown. In size the fruit is very large and, because of its form, is naturally compared with the Gandy, which it is said to excel in this respect. One grower declares it bears more fruit on single stems than any other variety, and that it is more productive, firmer, of better quality and with fewer green tips than the Gandy. Although we have not fruited this variety sufficiently long to speak of our own knowledge concerning its qualities, we can say for it that no other variety originated during the last two or three years has received such high praise from commercial growers as has the Chesapeake, and we very much desire that every customer shall set a sufficient number of the Kellogg strain of Chesapeake this season to give it a thorough trial, confidently believing it is destined to take a leading place among the higher-grade varieties.

LATE. Pistillate. Commercial growers everywhere find this great variety of highest value, and there is an increasing demand for it in the home garden as well. It is easily one of the most attractive of the late varieties, producing berries not only very late, but yielding immense quantities of them. The individual berries are of great size. As the illustration indicates, Sample is of the perfect type. In flavor it is most delicious and the fruit is rich and filled with juice. As the berries ripen the seeds turn red and so closely resemble the color of the berry itself as to be almost invisible. Stem and calyx are small and remain a bright green for days after the fruit has been picked. Not only is it one of the leading shippers, but it is a general favorite for canning purposes, ranking among the leading table berries as well. It is famous for its habit of coloring a certain percentage of berries each day until the season is over, insuring a long fruiting period. This is the fourteenth year we have offered this variety to our patrons.

ceived from you were the best put up of any I ever saw. Thanks for your promptness."

E. A. JORDAN.

Elmira, Feb. 25, 1909. "I received from you two years ago this spring 500 plants each of Senator Dunlap, Brandywine and Bederwood and had a fine crop last season—1365 quarts; and they were the finest berries in the city."

CHAS. W. DANIELS.

North Dakota

Wahpeton, Nov. 27, 1908. "In the spring of 1906 I got 750 of Kellogg's Thoroughbred plants. In the spring of 1907 I purchased 2000 more and in the spring of 1908 I set more than 2000 plants that I had propagated from those thoroughbreds. I now have one and one-half acres in strawberries, and they are the talk of the town. I sold more than 1000 boxes this year and got 20 cents a box for more than two-thirds of them and 15

cents a box for the last picking. My largest berries measured five and five-eighths inches in circumference. They were Prides of Michigan. Nothing but Kellogg's Thoroughbreds for me."

DANIEL PATTERSON.

Ohio

Put-in-Bay, July 31, 1909. "Although every one has told me something different to do with the thoroughbreds I bought from you, I have followed your advice only, and have done just what you told me to do, with the result that my plants, set out in April, are the wonder of the whole island and my greatest delight. I suppose you have seen such plants, but I never have—so big and strong and splendid—they are the finest things on our beautiful place!"

MRS. EDITH LOCKWOOD.

Randolph, Feb. 4, 1909. "All who have seen my plants when in blossom and also in bearing say they never saw the like. Have had as high as twenty crowns to a plant, and last summer

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

Cardinal, P. (Female)

LATE. Pistillate. This is one of the greatest varieties ever originated and stands among the leaders of the late pistillates. We first offered the Cardinal to our customers in 1908, and every claim that we have made for this variety has been more than confirmed by the wonderful results obtained since that time. We have shipped this great pistillate to thousands of customers, and it has given universal satisfaction. The fruit grows in great clusters, the berries are large and of a deep cardinal, as its name suggests. The flesh is dark and rich, and the berries have a most delicious flavor. It is one of the best of shippers. It has shown itself free from any tendency to fungi, and makes long, strong runners, and during heavy frosts at blooming time has come through uninjured. It has an extremely long fruiting season, and the last picking of fruit is quite as fine as the first picking. It is universally successful and thrives in all soils and under all climatic conditions. This is the fourth year we have had the Cardinal under our methods of breeding and selection, and each year adds to our confidence in its high qualities.

Stevens' Late Champion, B. (Male)

LATE. Bisexual. After five years of observation of the performance of this great late variety we cannot too cordially recommend it to our customers, as it is truly a champion among the late strawberries. This variety is in full fruit when most of the other late bearers have finished their season. Not only is it late, but it is one of the most productive of the late varieties and one of the finest market berries ever originated. As the illustration indicates, it is perfect in form, resembling Gandy in size, flavor and color. It thrives everywhere, is a strong plant maker and possesses extraordinary vitality. Holding its fruit up from the ground, the berries are free from grit and sand and easily picked. Its foliage is smooth and it is a deep rooter. Its late bloom makes it immune to late frosts. The Champion makes long strong runners and a great many of them. It is a powerful bisexual, producing great quantities of pollen, and is a natural mate for our famous Cardinal.

est for that variety I have ever seen. They will all live. Thanks and best wishes."

G. K. BOWMAN.

Oregon

LaFayette, June 26, 1909. The strawberry plants I ordered from you came in fine condition. I received them on the 12th day of April and set them out the next day. They are growing, every one of them; did not lose one plant. My ground was in fine condition and I have given them good care—and such plants; they are just fine!"

A. GOTTSCHÉ.

Silverton, April 26, 1909. "Strawberry plants ordered from you were mailed on the 7th inst. and arrived and were planted on the 13th, without water or rain since, and every single plant is growing and doing its best. They are certainly doing fine!"

I. S. MOE.

Hood River, July 4, 1909. "The 800 plants you shipped me this spring are doing nicely and their development is interesting some of my neighboring growers."

WM. B. DYER.

Pennsylvania

Independence, May 1, 1909. "Our half-acre of

picked nearly one quart of berries at one picking from a single plant. Some of the largest berries measured six and three-fourths inches in circumference."

C. H. FENTON.

Windham, May 30, 1909. "Plants arrived and I set out every one myself, and feel confident I will be well rewarded. I am well pleased with the plants, and I would not take \$10.00 for the knowledge I have gained from your book."

SARAH J. WHELOCK.

Oklahoma

Lawton, April 22, 1909. "The thousand plants I got of you last year came in fine condition and grew well all summer and fall. They are now blooming very profusely and the Texas are beginning to ripen. Wolverton and Parson's Beauty are also full of fruit."

T. A. RUNNELLS.

Stroud, April 13, 1909. "I received the Michel's Early strawberries I had ordered of you, yesterday. They were in perfect condition and the fin-

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

Pride of Michigan, B. (Male)

LATE. Bisexual. Since 1902 we have been selecting plants and fruiting from this variety, and we introduced it to our patrons in 1905. It met with instant favor and for several years it has taken the lead in the sale of plants of the late varieties. It requires each season more than 1,000,000 plants of the Pride of Michigan to supply the demand, and they go to every agricultural county in the United States and throughout all of the provinces of the Dominion of Canada. The letters we are receiving from customers from all parts of the continent assure us it is a favorite everywhere. In size the berries surpass all other varieties, and it produces a larger number of quarts of fancy berries than does any other late variety. In color it is a bright glossy red on one side, shading down to a lighter red on the other. It is very firm and exceedingly rich; the meat is solid and smooth and in flavor excels all other late varieties. It makes just enough runners to fill in a good fruiting row and is grown with less effort than most varieties because its runners are so easily handled. As a shipper it stands without a peer. Foliage is large; the bloom is unusually large and exceedingly rich in pollen, and it has a long blooming season; it is, therefore, one of the most valuable varieties for the mating of pistillates. Because this variety makes fewer plants than almost any other variety grown, it is impossible to sell the plants for less than \$8 per thousand; but no grower can at this price make a better investment than to set as large an acreage as possible to this best of all varieties. We are the only company from whom you can get plants of the Pride of Michigan.

Oregon Iron Clad, B. (Male)

VERY LATE. Bisexual. This is an extra-late, large, broad-shaped berry, in color a glossy dark red which extends from surface to center. It is a very productive variety, is of delicious flavor and possesses all the elements that make it a strong shipper, which explains its growing popularity among extensive growers. The seeds are bright yellow, the fruit retains its brilliant color for days after being picked, and the calyx remains fresh and green—points of highest importance to the shipper. Oregon Iron Clad is one of the long-necked varieties indicating sweetness. The foliage is extra large, light green and tall. The fruit stems are of unusual length and hold the cluster of berries up to full view. The plants of this variety stand very erect until the fruit begins to ripen, when the weight of the heavy fruit gradually pulls them down until the berries rest on the clean mulching. This is why this variety is such a favorite with the pickers. This is the eighth year we have propagated Oregon Iron Clad and each year we are more confident of its high value.

contained in that book is a great help to any man who does not 'know it all.' ” IRA S. VIRGIN.

Rhode Island

Edgewood, May 10, 1909. “The plants you shipped me in 1908 are wondrous to behold; and as they are near the street they attract a great deal of attention, and are admired by all. Never saw such plants before is what all say. Some have six perfect crowns and are loaded with buds and blossoms. I trust I may be in a place where I can plant Kellogg plants another year. I am assured of success if I do.”

EDW. H. LOCKWOOD.

South Carolina

Spartanburg, Jan. 19, 1909. “I have received a copy of your 1909 catalog, and it is a daisy. I get a copy of it every winter and you seem to improve it with each succeeding issue. It just

strawberry plants, all Thoroughbreds from your farm and mostly of the spring of 1908, are showing a fine and healthy growth, and I am sure we are to have a splendid crop this season, thanks to ‘Great Crops of Strawberries.’ The advice

Gandy, B. (Male)

LATE. Bisexual. This is one of the most universally popular varieties ever originated. Perfect in form, the quality of its fruit has made it famous the world over. Delicious in flavor, rich in color, extremely late as to fruiting time, and an extraordinary shipper—all these qualities make it a universal favorite alike with grower and consumer. The berry is bright red, with a smooth shiny surface studded with glossy dark-red seeds, the fine appearance being maintained after shipping hundreds of miles. Its extreme lateness insures to growers the top price of the season. The foliage of Gandy is tall, the leaves being dark green and of the texture of leather. Its fruit stems are long and strong, holding the berries up above the foliage so that the sun may put on the fine finishing touches. The fruit remains on the vines for several days after ripening without deterioration. Please remember that Gandy is deficient in pollen and should be set between other bisexuals. Also that it gives greatest yields on heavy clay soil. This is Gandy's twenty-fifth year in our breeding beds; we began propagating this variety the year the Kellogg farms were established.

teaches the way you cultivate and manage your strawberry farm. You tell about your way of doing things and your reason for it in such a clear and comprehensive manner that it seems to me no one need misunderstand or make a mistake in strawberry culture. I am a strawberry grower and have some of the Kellogg strain of thoroughbreds that I bought from you a few years ago and they excite the wonder and admiration of all who see them."

J. B. WILLIS.

South Dakota

Gary, May 17, 1909. "Received the plants in fine shape, and am pleased with them—they were the nicest plants I ever saw." O. S. RANSOM.

Tennessee

Dunlap, April 8, 1909. "Three years ago I bought 225 of your strawberry plants and set them out on five square rods of ground. The first crop—1907—I gathered 240 quarts of very fine

Brandywine, B. (Male)

LATE. Bisexual. For seventeen years we have bred this notable late variety, and the increasing number and growing size of the orders we receive for it supports every claim we have ever made for its superior qualities. Its berries are extraordinarily large, in color deep blood red to the center, the surface being indented with bright yellow seeds that are so prominent as to make a beautiful contrast in color. The berry possesses a flavor peculiar to itself and it attracts and holds customers of the most epicurean taste. Brandywine is one of the best canning berries known to commerce. The productiveness of this variety equals its attractiveness as to size and beauty, rendering it very popular with commercial growers everywhere. The calyx is very large; the stems grow erect, holding the berries well up from the ground. The foliage is ample and of upright form, with a dark-green leathery leaf which affords full protection for the bloom. Many of its flowers open under the leaves and thus are protected from late frosts.

berries. Last year I got 280 quarts and sold 200 quarts at 10½ cents for culls and 15 cents for choice berries, right at home. At that rate my berries brought me more than \$1200 per acre. My berry patch was the wonder and talk of the town. I never saw anything like it."

REV. J. W. CARNES.

Texas

San Augustine, April 30, 1909. "The strawberries arrived on the 24th. They were certainly fine plants. I noticed them this morning and they were growing right along. I shall have you ship me more plants next spring."

J. S. MACKECHNEY.

Utah

Grantsville, July 8, 1909. "In the spring of 1908 we bought a few hundred of your thoroughbred strawberry plants and they all grew and grew splendidly. This spring they were a mass of blossoms and the fruit just laid in piles along the rows. The first two pickings were the finest berries I ever have seen. We are preparing an-

Parker Earle, B. (Male)

LATE. Bisexual. Parker Earle enjoys the distinction of being the heaviest yielder known when set in rich low land, while it yields heavily in all kinds of soils. The berries of the Parker Earle are of medium size, bright red in color, which is so bright as to give the fruit the effect of having been highly polished. The meat is red throughout. The flavor of the Parker Earle is unusually rich and this has won for it widespread popularity. The productiveness, lateness and firmness of this variety make it very popular with large growers. This variety makes very few runners, a fact which is highly appreciated by the grower. Among those who prefer the hill system the Parker Earle is a general favorite. This is the twenty-first year we have had Parker Earle under our methods of selection and restriction, and it has proved itself to be one of the leaders in attractiveness in the market. We recommend it with complete confidence.

Aroma, B. (Male)

LATE. Bisexual. This is another variety enjoying universal demand. As the illustration shows, it is a perfect strawberry type, and the berries are very large and are bright red to the center. The flesh of Aroma is solid and smooth and the flavor richly aromatic. The berry is firm and so popular has it become as a long-distance shipper that in the great strawberry fields of the Southwest thousands of acres are annually set to this variety. When neatly packed in the box it is very attractive; the yellow seeds imbedded in the bright-red flesh give to it unusual beauty. Aroma is strong in pollen, making it a very desirable mate for pistillates, as the bloom begins to open medium early and continues until very late. The foliage of Aroma is a smooth deep-green of spreading habit which makes way for the sun clear down to the crown so that all of the fruit is thoroughly ripened. This is the eighteenth year we have selected and bred this great variety.

FOUR GREAT WESTERN SPREADERS AT WORK ON THE KELLOGG FARMS

PROPERLY to distribute barnyard manure is one of the most important features of farm work, and the Great Western Manure Spreader, manufactured by the Smith Manufacturing Co., 158-164 East Harrison St., Chicago, Ill., does the work to perfection. We require four of them. These machines tear the manure to shreds and distribute it evenly over the field. They are adjustable so that as heavy or as light a dressing as may be desired readily is secured. This feature is of great importance.

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

Dornan, B. (Male)

LATE. Bisexual. Tastes frequently differ as between varieties of strawberries, but we have yet to know of anyone having enjoyed the delicious flavor of the Dornan, with its sub-acid quality, but instantly admitted its superiority in that respect. The berry is immense in size and the great plants are loaded down with the big fellows, which make them exceedingly popular from the commercial grower's point of view. In color it is dark red on the outer side, shading down to a bright red on the other; seeds are red and yellow and the meat is deep pink, shaded down almost to white at the center. The foliage of this variety is dark-green and has a waxy appearance. It is very large, a vigorous grower and of upright habit. The roots are large and go deeply down into the earth, drawing up plenty of moisture. As a pollenizer Dornan is unexcelled. This is the eleventh year we have bred this most excellent variety.

other piece of land ready to set out some more of your plants next spring, as everybody who has seen and tested our berries this season wanted to buy some, and as there are very few strawberries raised in our village we are anxious to get more started. We could sell hundreds of quarts right from the patch." MRS. LE ROY ANDERSON.

Vermont

McIndoe Falls, Sept. 23, 1908. "The plants you sent me last spring are looking fine, considering the drouth we have had. We set the plants as soon as they came, and it was scorching hot for ten days after setting; then a light shower. No more rain for six weeks; very little rain this summer. Just twenty plants have died out of 3,300. I think the Kellogg plants are about it." W. V. DARLING.

Virginia

Covington, Feb. 20, 1909. "Enclosed find order for 15,000 strawberry plants same as you shipped last spring. Accept our hearty thanks for the most uniform lot of varying varieties and free

President, P. (Female)

VERY LATE. Pistillate. We have yet to hear from a single customer who has given the President an opportunity to show its leadership among American strawberries a word suggesting complaint or disappointment. In shape, as the illustration shows, it is of the perfect strawberry type. In color it is a mottled pink and red, these colors extending entirely through the berry. When packed neatly in the box it is as tempting a sight as any strawberry could offer; and that is saying a great deal. For so large a berry the calyx is unusually small, the seeds are yellow and brown and add a sparkling effect most charming. The flavor of the President is fine and the flesh is rich and meaty. When served upon the table with stems still remaining, it is peculiarly attractive. The foliage is large, light green in color, and the bloom is much larger than is generally found on pistillate varieties. This is the seventh year we have bred this noble pistillate variety in our beds, and each passing season confirms our confidence in it. Do not fail to order some of the President.

from old mother plants we have ever received. These were the finest plants we ever have received from any firm." JOHN DOLLINS.

Washington

North Yakima, May 18, 1909. "The plants I got of you all lived and are just fine. I am taking the very best of care of them, following your instructions strictly." M. S. GAUNT.

Garfield, April 13, 1909. "We have been very much pleased with results obtained from your berry plants and feel we cannot have too many of them. Neighbors say they never saw such berries." V. KATZENBERGER.

Wisconsin

Iron River, Jan. 21, 1909. "I have had excellent success with the Kellogg plants I set last spring. Most every one of the plants grew, and

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

Marshall, B. (Male)

LATE. Bisexual. Marshall is a popular favorite from the Atlantic to the Pacific and from the Gulf to British Columbia, and worthily so. It has received more first prizes in New England than any other variety, and it is just as much a favorite everywhere else because of its numerous qualities. It is of extraordinary size, it is beautiful in form, it is rich blood-red in color and has a delicious aromatic flavor peculiar to itself. It ranks as one of the richest berries on our list, the juice of this variety resembling a rich syrup, so heavy and sweet it is. For canning purposes it is excelled by few varieties, and with those who preserve their fruit in the sun it is a universal favorite. The foliage is extra large, and the plant is an upright grower, has round leaves about one-half of which are dark green and the other half light. When in full fruit there is nothing more beautiful than a row of Marshalls. This is the sixteenth year we have propagated this great variety.

my neighbors lost fully 90 per cent. of theirs."

W. R. GRACE.

Shell Lake, Feb. 18, 1909. "Last year I set out 3650 of your strawberry plants, and they grew finely though under very bad conditions. Your plants are the best I ever saw."

N. J. SODERQUIST.

Genesee, Nov. 15, 1908. "There are no better plants on earth than yours." SAMUEL NELSON.

Nye, Jan. 28, 1909. "I purchased from you in the spring of 1907, 600 plants. I do not think I lost a single plant by reason of any defect in the plant itself, and last year (1908) I set out 500 of your pedigree plants, which did exceedingly well in spite of the extreme drought during the summer."

MISS MINNIE VOLD.

Dominion of Canada

Columbia Gardens, B. C. "I believe you have the best strawberry plants in America."

GEO. A. PAULL.

Williamsville, Ont., March 22, 1909. "I think there are no plants like yours—1200 quarts from 1200 plants."

C. E. HULL.

Montreal, Que., May 6, 1909. "I have received in good order the box of strawberry plants. At the time of their coming and since we have had

Rough Rider, B. (Male)

LATE. Bisexual. The berries of this variety are medium large, of glossy crimson color, the crimson extending through to the center. The surface is made more beautiful by the prominent yellow seeds. The meat is juicy and rich. The illustration shows the form of the Rough Rider from which there is little variation. This variety is a good producer and enjoys the distinction of giving a better crop the second year than the first. The foliage is a dark green, of spreading habit and easily is controlled in the fruiting bed because it makes so few runners. We have carefully selected this variety in our breeding bed for eleven years and its growing popularity is attested by the steadily increasing demand.

pretty bad weather and it has been severely cold, but the plants were so finely packed that they did not suffer from these conditions."

A. C. PAPINEAU.

Fort Erie, Ont., Jan. 19, 1909. "I received your plants on time and in the best of condition. You had them so securely packed that they looked as fresh as a plant just removed from bed to shipping room."

FREDERICK S. ROSE.

Yahk, B. C., April 24, 1909. "The plants I ordered of you arrived safely, and seemed to be all alive and vigorous."

A. L. BARNHARDT.

To British Columbia Customers

WE are in receipt of the following notification from the Express Companies:

"All charges for express to points in British Columbia, Canada, must be prepaid or guaranteed."

In view of this ruling, we are compelled to ask those of our British Columbia patrons who wish their plants to come forward by express to include in their remittance for plants a sufficient sum to cover express charges. The average charge for express on 1000 plants from Three Rivers to British Columbia points, is just about \$3.00, and we suggest that this sum be added for each thousand plants ordered, it being understood that any excess remaining in our hands after prepaying express which amounts to 10 cents or over, will be promptly remitted at shipping time.

Price List of Strawberry Plants

Read Carefully the Inside Cover Pages of the Catalog Before Making Out Your Order

WHEN 500 or more plants of one variety are ordered we give thousand rates on that variety; but we do not permit customers to combine several varieties to make the number of plants 500 in order to secure thousand rates. There are no discounts on the prices given. We leave nothing undone in order to grow the best plants possible, and the prices quoted are the lowest at which they can be furnished. When plants are to be sent by mail, add at the rate of 25 cents per hundred plants to the list prices given. Postage to Canada is 50 cents per 100 plants. No orders accepted for less than one dollar, and no fewer than 25 plants of any variety will be sold. No order will be booked until at least one-third of the amount of cash required is in our hands. Please do not ask for any deviation from these rules. Be very careful to get the prices right.

EXTRA EARLY VARIETIES

VARIETIES	25 Plants	50 Plants	100 Plants	200 Plants	300 Plants	400 Plants	500 Plants	1000 Plants
Excelsior (B)	\$0.25	\$0.35	\$0.55	\$0.85	\$1.10	\$1.30	\$1.50	\$3.00
August Luther (B)	.25	.40	.65	1.00	1.35	1.60	1.75	3.50
Climax (B)	.35	.50	.85	1.35	1.85	2.25	2.50	5.00
Michel's Early (B)	.25	.35	.55	.85	1.10	1.30	1.50	3.00
Texas (B)	.35	.50	.85	1.35	1.85	2.25	2.50	5.00
Virginia (P)	.60	1.00	1.50	2.50	3.50	4.25	5.00	10.00

EARLY VARIETIES

Bederwood (B)	\$0.25	\$0.40	\$0.65	\$1.00	\$1.35	\$1.60	\$1.75	\$3.50
Clyde (B)	.30	.45	.70	1.10	1.50	1.80	2.00	4.00
Lovett (B)	.25	.40	.65	1.00	1.35	1.60	1.75	3.50
Tennessee Prolific (B)	.25	.35	.55	.85	1.10	1.30	1.50	3.00
Wolverton (B)	.25	.40	.65	1.00	1.35	1.60	1.75	3.50
Crescent (P)	.25	.35	.55	.85	1.10	1.30	1.50	3.00
Warfield (P)	.25	.40	.65	1.00	1.35	1.60	1.75	3.50

MEDIUM VARIETIES

Lady Thompson (B)	\$0.30	\$0.45	\$0.70	\$1.10	\$1.50	\$1.80	\$2.00	\$4.00
Ridgeway (B)	.30	.45	.70	1.10	1.50	1.80	2.00	4.00
Glen Mary (B)	.30	.45	.70	1.10	1.50	1.80	2.00	4.00
Wm. Belt (B)	.30	.45	.70	1.10	1.50	1.80	2.00	4.00
Splendid (B)	.25	.40	.65	1.00	1.35	1.60	1.75	3.50
Parson's Beauty (B)	.30	.45	.70	1.10	1.50	1.80	2.00	4.00
Klondike (B)	.30	.45	.70	1.10	1.50	1.80	2.00	4.00
Miller (B)	.35	.50	.85	1.35	1.85	2.25	2.50	5.00
Nick Ohmer (B)	.35	.50	.85	1.35	1.85	2.25	2.50	5.00
New York (B)	.35	.50	.85	1.35	1.85	2.25	2.50	5.00
Thompson's No. 2 (B)	.40	.60	1.15	1.80	2.35	2.75	3.00	6.00
Beidler (P)	.40	.60	1.15	1.80	2.35	2.75	3.00	6.00
Senator Dunlap (B)	.30	.45	.70	1.10	1.50	1.80	2.00	4.00
Haverland (P)	.30	.45	.70	1.10	1.50	1.80	2.00	4.00
Enormous (P)	.30	.45	.70	1.10	1.50	1.80	2.00	4.00
Downing's Bride (P)	.40	.60	1.15	1.80	2.35	2.75	3.00	6.00
President (P)	.50	.85	1.25	2.10	2.85	3.50	4.00	8.00
Clark's Seedling (B)	.50	.85	1.25	2.10	2.85	3.50	4.00	8.00
Challenge (B)	.40	.60	1.15	1.80	2.35	2.75	3.00	6.00
Arizona Ever-Bearing (B)	.50	.85	1.25	2.10	2.85	3.50	4.00	8.00
Longfellow (B)	.75	1.25	2.00	3.00	4.25	5.25	6.00	12.00

Price List of Strawberry Plants--Continued

LATE VARIETIES

VARIETIES	25 Plants	50 Plants	100 Plants	200 Plants	300 Plants	400 Plants	500 Plants	1000 Plants
Aroma (B)	\$0.30	\$0.45	\$0.70	\$1.10	\$1.50	\$1.80	\$2.00	\$4.00
Pride of Michigan (B)	.50	.85	1.25	2.10	2.85	3.50	4.00	8.00
Brandywine (B)	.30	.45	.70	1.10	1.50	1.80	2.00	4.00
Gandy (B)	.30	.45	.70	1.10	1.50	1.80	2.00	4.00
Dornan (B)	.35	.50	.85	1.35	1.85	2.25	2.50	5.00
Marshall (B)	.35	.50	.85	1.35	1.85	2.25	2.50	5.00
Parker Earle (B)	.35	.50	.85	1.35	1.85	2.25	2.50	5.00
Rough Rider (B)	.30	.45	.70	1.10	1.50	1.80	2.00	4.00
Bubach (P)	.35	.50	.85	1.35	1.85	2.25	2.50	5.00
Sample (P)	.35	.50	.85	1.35	1.85	2.25	2.50	5.00
Oregon Iron Clad (B)	.40	.60	1.15	1.80	2.35	2.75	3.00	6.00
Mark Hanna (P)	.40	.60	1.15	1.80	2.35	2.75	3.00	6.00
Stevens' Late Champion (B)	.35	.50	.85	1.35	1.85	2.25	2.50	5.00
Cardinal (P)	.40	.60	1.15	1.80	2.35	2.75	3.00	6.00

	25 Plants	50 Plants	100 Plants
Early Ozark, B (extra early)	\$0.50	\$0.85	\$1.25
Highland, P (early)	.60	1.00	1.50
Heritage, B (early)	.60	1.00	1.50
Fendall, P (early to late)	.50	.85	1.25
Buster, P (medium to late)	.40	.70	1.00
Chesapeake, B (late)	.50	.85	1.25

OUR SIX GREAT New Varieties

WE take pleasure in introducing these splendid varieties of strawberries, for never have we offered a better line of new varieties or those giving greater promise of extraordinary success in quality and quantity of yield and in profit and pleasure to growers. As the number of plants of each variety is limited, we are unable to quote thousand rates for any of them. If you wish more than 100 plants of any one of these varieties, therefore, simply calculate the cost according to the 100-plant rate, and remit accordingly. In any event do not fail to make a trial of these varieties.

PRICE LIST OF BERRY GROWER'S TOOLS

Runner Cutter { with handle	\$2.50
{ without handle	1.85
Dibbles, 35c each; three for	1.00

Dibbles cannot be sent by mail, but must go by express or freight.

PRICE LIST FOR ODD NUMBERS OF PLANTS

MANY of our customers order plants in odd numbers, and for their convenience we have added the following price-list, which gives at a glance the price for odd numbers. Please note, for instance, that 75 plants of a variety costing \$4.00 a thousand will be 60 cents; for 275 of the same variety, \$1.40, and so on.

NUMBER OF PLANTS	75	125	150	175	225	250	275	325	350	375	425	450	475
For \$3.00 Varieties	\$0.45	\$0.65	\$0.70	\$0.80	\$0.90	\$1.00	\$1.05	\$1.15	\$1.20	\$1.25	\$1.35	\$1.40	\$1.45
For 3.50 Varieties	.55	.75	.85	.90	1.10	1.20	1.25	1.40	1.50	1.55	1.63	1.65	1.70
For 4.00 Varieties	.60	.80	.90	1.00	1.20	1.30	1.40	1.60	1.65	1.75	1.85	1.90	1.95
For 5.00 Varieties	.70	1.00	1.10	1.25	1.50	1.60	1.75	1.95	2.05	2.15	2.30	2.40	2.45
For 6.00 Varieties	.90	1.30	1.50	1.65	1.95	2.10	2.20	2.45	2.55	2.65	2.80	2.90	2.95
For 8.00 Varieties	1.05	1.45	1.70	1.90	2.30	2.50	2.65	3.00	3.20	3.35	3.65	3.75	3.90
For 10.00 Varieties	1.25	1.75	2.00	2.25	2.75	3.00	3.25	3.70	3.90	4.05	4.45	4.65	4.80
For 12.00 Varieties	1.65	2.25	2.50	2.75	3.30	3.60	3.95	4.50	4.75	5.00	5.45	5.65	5.80

EVERY season the R. M. Kellogg Company receives a countless number of inquiries from customers relative to a place to obtain boxes and crates for small fruits of all kinds, and every form of fruit basket. For a great many years we have dealt with the Wells-Higman Company, St. Joseph, Michigan, one of the oldest concerns in the box, crate and basket line, and our confidence in this company, based upon this long experience, makes it possible for us to speak in unqualified terms of their goods and their methods. We therefore trust that our customers will consider this an answer to all inquiries of this nature. Remember that the address of this company is

Wells-Higman Company, St. Joseph, Mich.

Write for Catalog when in need of goods.

Our New Device for Cutting Runners

FOR many years we have had calls for a runner cutter attached to a handle, so that the cutter might be used separately and apart from the cultivator. We have at last succeeded in getting up a device that exactly fills the bill. The cut shows the simplicity of operation. The operator can guide the cutter so that it will cut off all runners as desired, as it may be run as close to the row of plants as you wish. The cost of the runner cutter and handle complete is only \$2.50, and we are sure it will save the price many times each season, to say nothing of the backaches that come from doing the work by hand.

Runner Cutter without handle, \$1.85.

Kellogg All-Metal One-Piece Dibble

THIS is our new 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 on the market. The price of this Dibble is 35 cents for one or \$1.00 for three Dibles. For setting strawberry plants and all kinds of vegetables it has no equal, and no one should attempt to make a garden without it.

The Berry Picker's Punch

Price, postpaid, 50 cents

THIS Punch is used for punching out the number of quarts of berries gathered by each picker. It saves much time, avoids many mistakes and prevents possible misunderstandings with your pickers.

Photographs

WE should like to have you send us a clean clear-cut photograph of your strawberry field or patch, no matter how large or how small the area. We should like also some statement of your success with strawberry plants to accompany photograph, and to have the view represent the plants when growing. Our purpose is to make a selection from the very best photographs of our Thoroughbred strawberry plants as grown by patrons for our 1911 book. Photograph should be in our hands not later than July 15, 1910.

R. M. KELLOGG Co.

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 not convenient to remit the entire amount at the time order is sent in, remit not less than one-third of the entire sum required to cover order, and your order will be filed and plants will be reserved for you; the balance due to be paid, however, before plants are shipped. We send no plants to anybody, no matter what his financial standing, until the cash is in hand. We send no plants C. O. D. to anybody under any circumstances. Do not ask it.

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 15 cents to cover cost of collection. This for the reason that the clearing-house associations all the country over have adopted a rate of 15 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 at once, for he will be unable to show any 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.

Orders sent in after March 15 must be accompanied by full payment to insure proper position in the files. 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.

Transportation of Plants

EXPERIENCE has taught us that the best and safest way to ship plants is either by express or mail, and it is cheaper by far when you come to figure up actual results. We recommend express even when the order calls for a large number of plants. And with small orders the cost by express is cheaper than by freight because express companies charge only for the exact number of pounds in the shipment, and carry plants 20 per cent. cheaper than is done in the case of merchandise. If your plants go by freight you will be charged for 100 pounds, no matter how small the package. We reserve the right to ship all plants by express for which orders are received after the shipping season opens. Do not send money to pay express or freight charges. You will pay these charges when you get the plants. The rate will be just the same. Although we have shipped and do ship plants by freight, we do not advise that method of transportation. What we desire to do is to get the plants to you at the earliest moment possible and in the best condition. If your order calls for less than 200 plants we would advise you to have them go by mail, as it would be cheaper than by express. Remember, when plants go by mail you should add 25 cents above the cost of plants for each 100 plants ordered.

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. But our experience has been that it is safe to calculate on from twenty-five to thirty pounds for each thousand plants when the plants are packed ready for shipment.

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 of each variety are ordered. The club order must be shipped to one address. Each bundle of 25 plants being labeled, the division is easily made. Catalogs will be sent to any of your neighbors, on request, to aid in making up the club.