RENEWING STRAWBERRY BEDS

BY RICHARD BAXTER ADAMS.

The practice of strawberry growers differs considerably as to how many crops of berries they will take from a bed before it is abandoned and a new one started.

The decision hinges largely on two questions: First, as to the relative expense of renovating the old bed and putting it in shape for another crop, as compared with the cost of setting a new bed; and second, as to whether the fruit from the old bed will be satisfactory after the renovation has been done.

Probably more growers take two crops from a bed than more or fewer; but many growers never take but one crop, and a few take as high as three, four or five.

As a rule it costs much less to renovate the old bed, generally about half as much, though this depends largely on how well the plantation has been cared for during its first season. Occasionally one finds a bed which gives a larger crop the second season than it did the first, but usually the crop is somewhat smaller, the berries not quite so large and the fruit ripens somewhat earlier than similar varieties in a newly set bed.

If the bed is to be renewed it may be done in various ways, but the following is the usual practice: Just as soon as possible after the crop is off, the bed is gone over with a mowing machine. This is usually followed by a hay tedder to stir up the old mulch on the bed and thus scatter it evenly over the surface and allow mulch and leaves to dry out thoroughly.

The bed is burned over, selecting a time when the material is fairly dry and when there is a good wind so that the burning will take place quickly. The principal advantages of burning are that most of the diseases and insects and weeds are destroyed; the objections to it are that a lot of humus-forming material is destroyed and that occasionally the crowns of the plants may be injured. But as a rule the advantages more than outweigh the disadvantages.

Some method is usually adopted to reduce the number of old plants on the bed, though occasionally a grower is found who merely cleans up the bed as just described and lets all the old plants remain. In this case he does not plan for many new runners to set that season, but depends on getting his fruit as a second crop from the old plants. Most of this work of cutting out the old plants is done with a plow. A furrow may be plowed along each side of each row, throwing the soil away from the row and leaving the centres. Or one or two furrows may be plowed from one side of each row, retaining a strip of plants along the opposite side of the row.

The former method has the advantage that one usually finds fewer weeds to contend with, since they were shaded out during the previous season by the strawberry plants. But it has the disadvantage that one retains the old plants set the year previous and which are now starting their third season; whereas in the second method the plants are all of them one year old and therefore more vigorous and likely to be more fruitful.

In addition to this plowing lengthwise of the rows many growers reduce somewhat the remaining plants along the strip of row which has not been plowed under. This may be done by running the plow crosswise of the bed and thus checking it off into small squares a foot or so on a side. Or it may be done with a hoe. In this way some growers reduce the number of plants to not many more than were originally set out, though usually there are several times this number.

The soil of the bed should next be worked over thoroughly to get it back into fine physical condition. A cultivator with large teeth may be used to advantage to start the work, followed by one with spike teeth. Or the whole surface of the bed may be worked over with a smoothing harrow. This latter is rather heroic treatment, but surprisingly good results are often secured by it, and of course it has the advantage of being quickly and cheaply done.

Lastly the bed should receive a good dressing of fertilizer. Quantities and forumlas will vary according to whether the soil is more or less fertile and whether it has been well cared for or not, but for average conditions the following per acre will be found satisfactory: 100 pounds of nitrate of soda, 250 pounds of tankage and 400 pounds of acid phosphate.

Or if tankage cannot be had, use 250 pounds of nitrate of soda and 400 pounds of acid phosphate.

This should be scattered directly on the rows, but unless it is applied immediately after the bed is turned over, so that there is no foliage on the vines, it should be applied when the leaves are dry, otherwise they may be injured by the nitrate of soda.

In the Garden.

The most important work now facing the gardener is cultivation. Make a point of stirring the soil between the rows and around the plants once a week. Such constant stirring of the surface hastens growth, conserves the soil moisture and keeps down all weed growth.

But never cultivate or work among the beans while the foliage is at all wet, either with dew or following a shower; delay until the leaves are perfectly dry. Anthracnose, that horrible disease which destroys the foliage and marks the beans in the pods, is always present while the weather is moist and warm, and the germs are scattered broadcast when they are disturbed under these conditions.

This disease is so prevalent in some gardens that to prevent it from getting a start on the young plants preventive measures must be taken in good time, spraying at intervals of six to ten days with Bordeaux mixture. Spraying may be discontinued, once the plants are well set with tiny pods.

Anticipate the attacks of the potato beetle by spraying with a Bordeaux-arsenate solution.

The potato beetle is partial to the leaves of the eggplant; therefore, keep the foliage covered with the poison and so eliminate all danger of these and other leaf-eating insects.

The striped cucumber beetle seems to know that seed of his favorite titbit is underground, for his whole family is on the patch as the first leaves are breaking through the surface. Be prepared with tobacco powder, or land plaster to which a little Paris green has been added—say one part to one hundred parts of land plaster—and dust each hill thoroughly.

It may be necessary to repeat the application two or three days later, and always following a shower. This also applies to melons, pumpkins and squash. As the plants become larger and begin to vine, use the Bordeaux-arsenate mixture regularly.

Watch Out for Mites.

This is the time to expect mites to appear in considerable numbers. No matter how carefully the houses have been cleaned and disinfected, there is always the danger of some mites lurking over from the previous season.

Examine the nests, perches and perch supports frequently. If signs of mites appear, the perches should be taken outdoors and painted with a mite-eradicating solution. Perch supports, cracks around the droppings boards and the nests should be treated in the same way.

Many paints and sprays can be used. Some are commercial mixtures, many are homemade mixtures. The secret of a good eradicating preparation is that it contains oil, which leaves the surface greasy so that the mites cannot travel over it.

Lubricating oil, such as is used in an automobile, is excellent. If you live near a garage ask your garage man to save for you his refuse oil. Add to this an equal quantity of kerosene. The kerosene thins the oil so that it will paint or spray on readily. It gives a mixture that penetrates the wood, but does not grease or soil the birds' feathers. To lubricating oil and kerosene add from 2 to 5 per cent. of a good disinfectant.

One or two applications leave the woodwork dark brown in color and slightly oily to the touch. Mites never bother a poultry house where this preparation is used.

One or two applications during the summer are sufficient, but do not let the mites get ahead of you.

Summer Roosting Shelters.

Now that warm weather is with us again, it is time to think about giving our growing chicks, which spend their days on the range, all the fresh air we can at night. Too often fifty or a hundred growing pullets or cockerels are put in small colony houses, open only a little on the front, and compelled to roost there throughout the hot summer months.

Chickens have an extremely high body temperature, which means that they require greater amounts of oxygen than does any other form of animal. A small, tightly inclosed colony house does not admit of their securing a sufficient amount.

The tendency on poultry farms is to build so-called open-air roosting shelters. These consist of a roof, supported on four or more stakes, sides of inch-mesh wire netting and are filled with perches.

The roof protects the birds from storms, yet there is ample fresh air, and they are practically under the same conditions as they would be if roosting under a tree. Furthermore, these open-air birds are much more easily kept clean and free from mites. The wire netting makes it possible to shut the birds in at night, and to protect them against animals. It is also easier to catch them if necessary.

A good open-air shelter is a building about 8x10 or 10x10 square, with corner posts about five feet high, board floor, and a board roof covered with roofing paper. Let the roof extend about a foot over the south side to protect the fowls from driving storms. The entire area of the coop can be fitted with perches, setting these about eighteen inches apart.

Such a shelter can be built for about half the cost of an ordinary colony house.

It is of no advantage to agriculture to have folks pursuing that vocation who are dissatisfied with it. If they want to go to the city to live, nothing should be placed in the way of their going. Those who are recruited to agriculture through ignorance or deception add nothing to the quality of rural society. The greatest of human tragedies is that in which the worker fails to find pleasure in his work. —H. J. W.

Making Good Butter.

It is not difficult to make butter, but scrupulous cleanliness must be observed at every stage. All utensils should be washed and scalded before and after churning.

The cream should contain about 30 per cent. butter fat. A gallon of cream of this standard will yield about 3 pounds of butter. It is better to churn the cream, not the whole milk. The cream should be cooled immediately after it comes from the separator and kept as cold as possible until the time for ripening, which should be done at a temperature between 65 deg. F. and 75 deg. F. When the cream is mildly sour, it should be cooled to churning temperature or below and held so for at least two hours before churning begins.

Successful buttermaking depends largely on the temperature at which churning is done but there is no one temperature proper for every season of the year. Churning is a mechanical process, and if it is done under the same conditions on one day as on another the results should be identical. The temperature is the factor which must be varied to get uniform results. If the temperature is too low, the churning period is unnecessarily prolonged, or it may be impossible to obtain butter. Too high a churning temperature is also to be avoided because butter fat will be lost, the butter will be soft, and will not keep well.

Butter will come in 10 minutes at too high a churning temperature, or even in 7, with some patent churns, but it will not be such good butter. In summer when the cattle are pastured and fed on grass, the best temperature is between 52 deg. F. and 60 deg. F. In winter it will range from 58 deg. F. to 66 deg. F. The dry feed, housing in barns, and approaching end of the lactation period contribute to this difference. If the churn is not loaded over one-third full, and not turned too fast, then butter should come, under these respective temperatures, in a firm granular condition in about 30 to 40 minutes. If electricity is available the churn can be attached to a motor but the speed must be regulated to correspond to the best rate of hand churning, about 60 revolutions a minute.

Butter color is added, if necessary, when the cream is strained into the churn. When butter granules are formed the size of wheat grains it is time to strain off the buttermilk and wash the butter in the churn in two waters of the same temperature as the buttermilk. The thermometer is essential for this, as for all the other accurate estimates of temperature in the various steps of butter making.

Three-fourths of an ounce of salt is worked in per pound of butter. Working of the butter is a very important part of the process and should receive careful attention. Overworked butter is sticky, greasy in appearance and has a gummy grain. Underworked butter is very apt to be mottled because of the uneven distribution of the salt.

Palatability of Feeds.

It is probably true that a hen does not have a very keen sense of taste, but she does dislike certain feeds, and if these are used to make up too large a proportion of her ration she will eat less than she would consume of a more palatable mixture. The practical result is that egg production is not kept at a high level.

Among the feeds that are particularly distasteful to the hen should be listed blood meal and rye, either whole or ground.

The protein of dried blood seems to be of poor quality, at least in so far as its use by the hen is concerned, and this fact may partly account for her tendency to leave it alone.

Similarly, in the case of rye there seems to be danger of rather serious digestive trouble if any appreciable quantity is eaten by poultry.

Some feeds, such as red dog flour, are not readily eaten when offered to the hens singly but will actually increase the palatability of certain mixtures to which they may be added.

It is because hens show a marked ability to distinguish between different mixtures that we should be very careful not to make sudden or severe changes in the make-up of the mixtures fed. Such changes are likely to be particularly disastrous during the next two or three months.

Chickens need sunlight to prevent rickets.

I have had a silo for 14 years, always haul manure direct to fields, and have never failed to catch clover on those fields. Some years—1923 was one—I had a good stand. Most farmers not having silos failed to get any clover on better soil than mine. Furthermore, I have applied twelve loads an acre of manure from silage on poor, sandy soil and got a good stand except where there was lack of lime. —W. J. M.

THE MOUTHS OF PLANTS

"If you were very thirsty," said old Mr. Ewing, "and I was to pour a glass of water on the top of your head would you be very grateful to me?"

"No," said Tom, who was watering his geranium, "I'd be mad!"

"Well," said the old man, "you are not treating your plant much better. It has mouths, and it likes to drink when it is thirsty, but you don't pour the water into its mouths."

"I don't know where they are," said Tom, looking curiously at the bush.

"Its leaves are full of eager little pores and they are choked with dust," Mr. Ewing said. "Just put the nose again on the watering-pot and wash off the leaves."

Tom picked up the nose, put it on the spout of the pot, and gave the bush a thorough wetting.

"It does look better," he said. "Has it any other mouths?"

"Plenty more," said the old man; "one at the end of each rootlet. When you pour a stream of water around the stem of the plant, I think it must feel as you would if I put drink on your head."

"Yes," said Tom, "see that fuschia. I didn't water the leaves nor the ends of the roots, I am sure."

"And don't you see you are doing the same thing by that rhododendron?" said the irritable old man. "When you do anything, boy, do it in the right way!"

And he took the watering-pot himself, and every mouth in each plant got a good drink that time.

MAKES 8,500-MILE TRIP ON DORY

Just a few days after the new Canadian Pacific B.C. Coast Liner S.S. Princess Kathleen entered the Victoria Harbor after her maiden trip from the Clyde, Scotland, a little 25-foot dory slipped away from the quay almost under the nose of the new arrival bound for the Old Country by the very route which the Marguerite had just traversed.

On board the neat one-masted sailing ship in which he expects to make the perilous 8,500 miles voyage to Great Britain was Commander Eustace B. Maude, R.N., Resident of Mayne Island, B.C., who, although seventy years of age, has not lost that courage and daring which is so necessary on an undertaking of this kind.

All the traditions of the British Navy are bound up in the ambitious enterprise of this venerable Commander. As a young man Commander Maude was First Lt. aboard the Royal Yacht of Her Late Majesty Queen Victoria, the Victoria and Albert, and his first naval command was on the Tameraire, on which he commanded engagements off the Malay Peninsula and in the China Seas against nautical pirates.

The Half-moon, as Commander Maude has maintained, has an auxiliary consisting of a five H.P. engine on which the gallant Commander will fall back in case of calms or adverse weather.

FOR HOME AND COUNTRY

Are You Fit?

The Junior Women's Institutes went to Macdonald Institute at the O.A.C. for four glorious days this spring. Among other things they discussed how to attain physical fitness, and here is a summary of the conclusions at which they arrived:

1. Physical fitness is the highest standard of health which we can attain, so that we may be of the greatest service to humanity.

2. Objective Signs of Physical Fitness (How we look).

A. Good posture—erect carriage in standing, sitting or walking.
B. Clear complexion, good color.
C. Clear, bright eyes.
D. Glossy hair.
E. Firm, white, regular teeth.
F. Well proportioned body—weight not more or less that 10 per cent. above or below standard for height.
G. Hygenic clothing.
H. Personal cleanliness.
I. Enthusiastic manner.

3. Subjective Signs of Physical Fitness (How we feel).

A. Energy and zest in work and play, kept in sensible proportion and balance.
B. Enjoyment of wholesome food.
C. Feeling of rest and refreshment on rising.
D. Feeling of healthy fatigue at bed time.
E. Freedom from persistent worry.
F. Freedom from persistent or regularly recurring pain.
G. Endurance.
H. Self confidence.

4. If you are honestly intent on being physically fit you must: (1) Eat regularly, (2) eat slowly, (3) eat some hard food for the sake of the teeth, (4) eat some fresh, raw or green food every day, (5) avoid overeating, (6) avoid undereating, (7) eat lightly of easily digested food when tired, excited or anxious, (8) drink three to five glasses of water every day outside of mealtime, (9) eat sweets at the end of a meal, not between meals, (10) never drink when there is solid food in the mouth, (11) before putting food in the mouth, wash the hands.

Rest: (1) Spend eight to nine hours in bed every night. (2) Sleep out of doors when you can. (3) Sleep as nearly as possible in outdoor air all the time. (4) Do not expect to sleep at night unless the body extremities are warm. (5) Lie down for ten to twenty minutes rest near the middle of the day if possible.

Exercise and Recreation: Spend at least an hour a day in recreation and exercise, outdoors if possible. (2) Take exercise that is enjoyable and vigorous enough to require deep breathing and to open the skin pores. (3) Exercise daily, not only the extremities but the trunk of the body. (4) Acquire and maintain a good posture. (5) Avoid weak and fallen arches; wear healthful shoes.

Cleanliness: (1) Take a cool tub, shower or sponge bath. Use coarse towel for vigorous friction. (2) Twice a week, take a warm, cleansing bath at bedtime. (3) Attend to evacuation of the intestine daily with absolute regularity.

Mental Recreation: Get some form of mental as well as physical recreation. Cultivate a hobby. Cultivate and preserve a play spirit.

Avoid worry as you would the plague. Be cheerful. Be unselfish. Preserve a sense of humor. Cultivate imagination. Be determined to be physically fit, but don't worry about your health of all things.

Two Ways of Handling Tantrums

BY FLORENCE BASCOM-PHILLIPS.

"Mamma! I want to go out and play," four-year-old Flossie announced one morning.

"Not to-day, dear," answered her mother. "It is too damp and rainy."

"Please, Mamma," coaxed Flossie, "I like rain."

"No, Flossie, you can't go outdoors now," answered her mother firmly.

After more teasing to no avail, Flossie resorted to a new scheme which she was sure would bring Mamma to time, that of berating all her mother's friends and relatives.

"Grandma's bad! Grandpa's bad! Aunt Mary's bad!" Flossie paced the floor as she made the announcements.

To the child's utter chagrin, her mother ignored her completely. Anything would have been better from Flossie's standpoint than to be ignored; even a spanking would have been preferable, for she would have known she was making some impression on Mother. She soon wearied of that scheme when she could see no effect at all. Then she resorted to the only means she had left to bring Mother to time, that of having a tantrum, the first and only tantrum she ever had.

Flossie was not angry when she began her tantrum, merely determined to gain her point. You see, I have a perfect right to tell you what Flossie thought, for I was Flossie. Flossie lay down on the floor and kicked furiously and yelled, "I want to go outdoors and play, I do!" Still, Mother paid no attention whatever, and after a few minutes Flossie wearied of her one-sided game and began playing with her dolls as good humoredly as ever.

Contrast Flossie's experience with that of young Charles. When Charles was about two years old he developed the habit of screaming for what he wanted and crying furiously if the other children did not give up to him. If this did not bring the accustomed, "Let the baby have it, children," from Mother, or, "Give that to Charles this instant. You ought to be ashamed to make a little boy cry," from Father, Charles bumped his head, kicked his heels, stiffened himself and bellowed, until one of his distracted parents would give the desired command to the other children. Then he would grasp the coveted article, shut his jaw defiantly and grunt one long "Ugh" after another until the spell subsided. This course was followed until Charles became so adept at gaining his point that, even after the arrival of another baby, he continued to hold sway. It was the baby who had to give in to Charles, not Charles to the baby.

Charles soon learned that the whole family stood in awe of his "mad spells" and he made use of his supremacy on every possible occasion. Eventually, his parents wearied of having a great big four-year-old lying on the floor kicking his heels and screaming at the top of his voice a dozen times a day and began punishing him for it, and while they eventually succeeded in putting an end to his tantrums by this method, he is still, at eighteen years of age, so disagreeable that his family can scarcely live with him, for the selfishness which was cultivated in him in babyhood has grown to monstrous proportions.

The first time any child shows a determination to have its own way in defiance of better judgment on the expense of others, whether by wilful disobedience, crying, holding the breath or tantrums, that is the time for the parent calmly but certainly to prevent it. One decided victory on the part of the parent will often practically end the matter, while one victory on the part of the child means constant trouble for the parents from then on, trouble for each teacher the child ever has, and perhaps the reform school or penitentiary eventually for the child. The learning in the home, of obedience to parents and respect for the rights of others is the foundation for obedience to God and respect for the laws of the land.

THE STURDY REEFER COAT FOR BOYS.

Boys like practical coats, and this double-breasted model, No. 1085, if made of Donegal tweed or covert-cloth, would give long, hard service for school wear and accompany him to the ball game afterward. The coat has plain unbelted back, long two-piece set-in sleeves, notched collar, and set-in pockets with flaps. Cut in sizes 2, 4, 6, 8 and 10 years. Size 8 years requires 1⅜ yards of 54-inch material, with 1⅞ yards of 36-inch lining material. Price 20 cents.

HOW TO ORDER PATTERNS.

Write your name and address plainly, giving number and size of such patterns as you want. Enclose 20c in stamps or coin (coin preferred; wrap it carefully) for each number, and address your order to Pattern Dept., Wilson Publishing Co., 73 West Adelaide St., Toronto. Patterns sent by return mail.

Do not fill kerosene or gasoline lamps or stove tanks quite full. Leave a little space.

There is an old rural maxim: "Everything in the hen house should be as dry as a chip."

If finely-varnished surfaces are scratched, the damage can be remedied by rubbing lightly with alcohol to soften the varnish and obscure the crack. When the varnish hardens again, polish, and the crack will never