

For the Boy and Girl  
Gardeners of California

# The Junior A

## Enter the Contest Today!

Are you going to enter the sweet pea contest? If you are, you should begin right away. There are so many things to do—seeds to purchase, soil to get ready and plats to weed. Then there are ways and means to be studied and the proper care of the fragile flowers. The children who have been following the garden lessons since their beginning in The Junior Call will be much better prepared for the struggle than their more laggard brothers and sisters. They will have learned all the necessary little points, such as the preparation of the soil and the different kinds of soil, the cause and effect of water upon them, the planting of seeds, the needs of the various bits of plant life, the arrangement of the gardens, etc. They will also have gained the benefit of the special letter on the sweet pea industry which appeared in The Junior Call Agriculturist on Saturday, December 9. In this the needs of the sweet pea were gone into with much exactitude, from the earliest preparation of the seeds and soil to the ultimate care to be given the young and blooming plants.

Now, for the benefit of those Juniors who have not as yet grasped the significance of the garden movement, which The Junior has been and is earnestly indorsing, a little talk on this, our latest contest, will not come amiss. Beginning with the second Saturday in December, The Junior has been making weekly statements in regard to the sweet pea contest, and the announcement today embodies all that has gone before. As you can see, prizes are to be offered not alone to schools and clubs, but to individual growers themselves, and the main condition is that the contestant must be a member of the California Garden club. The conditions following are subordinate to this, and are no more than could reasonably be expected in such a contest.

As soon as you have entered your name with Professor Stebbins, you should begin at once, as it is estimated that less than a month at most remains for planting. The seeds should be in the soil by the first of February if possible. Books on the cultivation of sweet peas should be read and studied, and florists interviewed. You should endeavor to obtain all the data on the growing of these flowers possible to acquire. As announced officially on the opposite page, the prizes will probably be awarded on the 12 best sprays of sweet peas, not on a great number. Endeavor to obtain, not quantity, but quality. The prizes, as you see, will be well worth trying for, and it behooves the industrious gardener to begin work at once.

Now let's see how large an enrollment we can have. Everybody join the gardens—the more the merrier! Start your work in the sweet pea contest in good earnest today. Don't waste any time. If there are any questions you would like to have answered, write to Professor Stebbins. He will be more than glad to furnish all the information necessary. The main thing is to begin at once.

Plant your sweet peas now!

## SELFISHNESS VERSUS SERVING

Juniors, a boy once visited an apple orchard before the apples were ripe. He fed hurriedly on the green fruit. The following day the apples raised a great fuss in Johnnie's stomach and he suffered severely. Did he have a right to eat the green apples? He knew they might make him sick. If you were told that green apples would make you sick, and some were given you, would you be doing right to eat them? Would you have a right to eat them? If you have a bad cold, have you the right to neglect it? We should like very much to hear your answers to these questions. We can hear some one say, "It is no one's else business if I want to eat green apples; if I want to neglect my cold. They belong to me." Let us see if he is right.

Johnnie's unruly stomach caused him to scream with pain. His mother and sister loved him so they suffered with Johnnie as they tried to relieve him. The green apples caused a fever, the telephone called the father from his business. The doctor was sent for. Johnnie and the green fruit upset and made unhappy all of his best friends. Did he have a right to eat the apples?

Colds, like diphtheria, are contagious. A young man came to board with 10 others. He brought a severe cold. In a few weeks the 10 had suffered or were suffering with colds. Had the young man the right to make 10 friends suffer? Should he not have taken care of his cold so as not to make others unhappy? Have you a right to neglect a cold?

Flies breed in barn manure, mosquitoes multiply in water and cause malaria; bacteria, which cause sickness, may breed in filth; weeds destroy other plants. Have you a right to be careless with the offal from a barn, to let water stand in old barrels, to allow filth around your home and on yourself; to let weeds grow in your garden, and to cause unhappiness in any way for your neighbor or friend? What is the answer? Our answer is no. It is your duty. It is our duty to help to make our friends happy. We have no right to eat green apples, for they make not only ourselves, but others, unhappy. Our duty is not only to make ourselves strong and good, but to help to make our neighbor, our friend, strong and good. Write to the editor and tell him what you think about it.

### She Has a Flower Garden

HELEN JENSEN,  
1103 F Street, Fresno

My flower garden contains many different kinds of flowers. My garden is in our front yard. I have the red and white and the pink geraniums, the pink chrysanthemums, the red and white roses and morning glories climbing all over our porch. I have the red four o'clocks and I have a small pepper plant. This plant grows to the height of 18 inches and has small red peppers about an inch in length. On one side of our house I have an apricot tree. It is about a year and a half old now. This summer it had many blossoms, but papa picked most of them off. He only left a few on. He said the tree would grow better and stronger. In the month when we have no school I water my garden every morning and evening, but now I water my garden every night.

### Class Divided Into Squads

HAZEL VANDEVENTER,  
1927 Merced Street, Fresno

Mr. Hutchinson made the gate to the fence around our lot for us. About two weeks ago Saturday we plowed the ground a little so when it rained the water could soak in. A few days after that it rained and made the ground easier to spade. Wednesday some of the boys respaded the ground. They divided it into four plats and made paths between them.

Our class is divided into four squads. Each one has a captain, and the captains picked out their squads. The captains get their instructions from the teacher and then tell the others what to do. Our plat is in a corner of the lot. We planted carrots and the others planted onions. Before we planted them we raked it all over and then tied strings around the sides, so as to keep the sides straight. After we planted them we found some rocks in a vacant lot and put them around the sides.

## GARDEN NOTES

We have received many New Year greetings from the Juniors. Among others has come a beautiful color design of holly and the Christmas star from the Fresno Junior Gardening club, Miss Harvey, teacher. Juniors, we wish you all a new year rich in happiness and good doing.

The "Junior Agriculturist" which is mailed to you separate from the "Junior Call," reaches the club members irregularly for we are waiting to be put on the newspaper rate mailing list.

We hope that you are all going to enter the sweet pea contest. Seeds should be planted by February first at the latest. See the "Junior Call" of December 9 for instructions in growing sweet peas.

Do not forget to start such flowers as pansies, stocks, daisies, etc. in boxes now for early summer flowers. You should be making plans during this wet weather for early spring planting. The school yard should be made more attractive. Did you read the lesson in the last issue on "Beautification of School Grounds?"

### The Franklin School Garden

BERNARDINE THOMINE

The A fourth and B fifth grades have started gardens. They are situated in the rear of the Franklin school playgrounds, facing Virginia street. The large plat is 132 by 30 feet. Our own plats are 4 by 5½ feet. When we march up the stairs carrying our hoes, picks, rakes, shovels and forks we look like farmers coming home from work.

All are taking great interest in the gardens. We expect to have the best vegetables on the market, so if you want any vegetables come and buy from us.

The class has formed a club and we have club pins. A paper is distributed to us twice every month. The articles in it help us a great deal in our gardening.

### An Appreciation

DOROTHY DOW

Our teacher, Mrs. Melquiond, is having us write about our gardens. I have planted a garden at home that is doing better than the one at school. In my home garden I have planted lettuce and radishes that are coming up, and carrots, onions and spinach that have not yet come up.

For flowers I have planted sweet-peas, poppies and pansies. Monday I am going to plant more seeds in my school garden. We wish to thank Professor Stebbins for all the things that he has given us to start the garden with, and know that he will be glad to learn that they are doing well.

### A Letter to Professor Stebbins

Professor Stebbins—Dear Sir: I thank you very much for the papers which I received, and was glad to get them. I also want to thank you for the buttons. Our garden is growing finely. The class had their pictures taken in the garden by the palm tree.

For a border we have used parsley, and by the house and fence we have climbing plants, while in the center we have vegetables. Under the palm tree we have a lawn.

When the class has spare time the children work in their garden, for there is always something to do. Yours respectfully,

BERNARD MORAN, Oakland.

### My Garden

HAZEL TATE,

San Leandro School, Low Fourth Grade

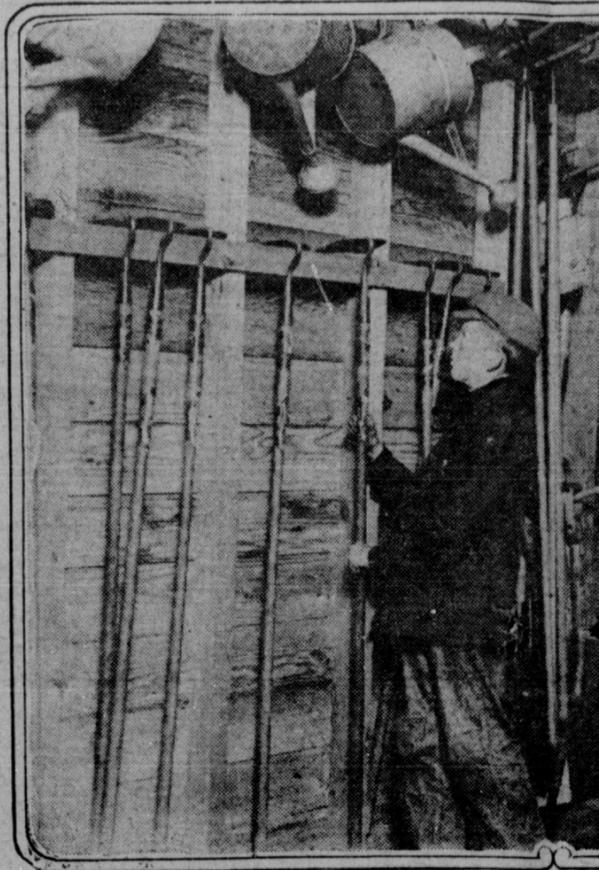
The first thing I did was to get the soil in good condition. Then I drove my stakes and was ready to plant my vegetables. The first thing I planted was lettuce; then radishes and covered them well. After I planted my radishes I planted parsley. We have 42 gardens and all are in good condition. Every evening they are watered well, so that they will grow well.

### Junior Call Letters Read

FANCHON WOOD,  
Paso Robles

We appointed a girl to cut out the letters from the Junior Call. After she cuts them out she puts them into a box. Almost every day we read one letter. On club days we read several letters. After the letters have been read to the class the teacher puts a mark on them so that we will know that they have been read. I think the letters are very interesting and I think the rest of the club feels as I do.

I like best to have the letters about plants and experiments read because it shows what to do to make things grow better. We learn things from the letters that we did not know before.



Berkeley Gardeners Putting

## JUNIOR GARDENING

### CHAPTER 13 IMPROVEMENT OF SOIL Exercises

1. Lay off a portion of your garden in checks as explained in Chapter 7. Make the checks 4x4 feet. Treat the plats as follows:

No. 1—Stir in 8 or 10 ounces of nitrate of soda.

No. 2—Add one pound of acid phosphate.

No. 3—Leave vacant as a check.

No. 4—Add muriate of potash, about four ounces.

No. 5—Add nitrate of soda, eight ounces, and muriate of potash, four ounces.

No. 6—A mixture of potash, four ounces, and acid phosphate, one pound.

No. 7—A mixture of potash, four ounces, acid phosphate, one pound, and nitrate of soda, eight ounces.

No. 8—Stir in wood ashes.

No. 9—Add bone meal.

No. 10—Add lime.

No. 11—Stir in two inches of well rotted manure.

(Ask your teacher to send for the above commercial fertilizers.)

Grow the same kind of seeds in all the plots and give them all the same treatment. Observe results each day.

2. If land can not be obtained for the exercise use chalk boxes containing sand and use smaller amounts of fertilizer. Divide the above amounts by 8 to determine proper proportions.

3. With the assistance of your teacher make up 1 per cent solutions of muriate of potash (M-P) acid phosphate (A-P), nitrate of soda (N-S), muriate of potash and acid phosphate, muriate of potash and nitrate of soda, muriate of potash and phosphate and nitrate of soda, manure. Use distilled water. Germinate wheat seeds after the roots are well formed, suspend the seeds in the solutions as shown in figure 1. Use fine meshed netting. The stems will force themselves through the cotton. Prepare one solution very strong.

4. Select two plats of land 10x10 feet. Sow half a pint of barley, two or three quarts of soil taken from a field in which clover or alfalfa has been grown and half a pound of alfalfa in one. Rake it all in. Treat the second plat in a like manner, omitting the soil containing the bacteria. Cut the barley before it heads out. Observe the growth of the alfalfa and its roots from time to time.

5. Try to find a crop growing on land previously planted to a legume. Compare the crop to one growth on land not so treated.

You have learned that soil may be improved by deep, thorough plowing, by thorough cultivation, and you have learned something about plant foods.

**Air and Soil Food**—You have learned that about 97 per cent of a plant's food

is obtained from the air and but 3 per cent of from the soil, yet with plants could not live. plants very much to namely carbon, but plants to be strong by the soil. Plants need nitrogen, phosphorus, and now you have learned how to furnish them. **Loss of Fertility**—It is necessary to help plant fertilizers, for soil may (1) by being washed rains, (2) by poor drainage soil bacteria are killed.



ing alkali to the surface irrigation with (4) by growing the crop after year. This loss can be prevented and remedied by growing and growing to prevent washing, (1) use of lime, (2) less irrigation drainage, (4) fertilizer rotation.

**Nitrogen**—Nitrogen is an important part of plant food, four-fifths of the air is nitrogen. While it is so very abundant, most expensive of fertilizers about 18 cents a pound of special fertilizer. It seems a food (a gas) which