lk. nil! O COWS nd heifer roo r churn. s ti. hy the earthe latter is in cream that it hind into opport corn.

A. E. H. contribute to is very likely We suspect rocker churn very efficient Change the your separa-20 per cent. cream testing ne lowest-30 our make of try to take nust comprosalted reguo give them ot be feasible re both skim lly for fat.

ars, butter is gland. Since ces have been lly it looked ported. But nprecedented e butter ben 16 to 191

Raising.

to give the inter. that I was last spring, hens. Mν , and some ber. I put 1st, and up gs, but they 1st I had of weather w zero made sing. Durfour of the t of broodi-

hilo system he care the had equalone, or got lts. y way, and louses, ults, while ioning. th a good as likely e not done

t possibilind poultry the only Thousands uld have a ckens, and ying. Many hey would e observed, nyone with liness could e, and the to the garaintiest of nice roast

mers where it entails hunted up production ng always some may have disand have

ime. This neat meal, lk curd. I . but give of iron in heat, and tion takes I use oat straw for litter, and throw in a

little clover chaff occasionally.

On account of the limited space in a coop 3 x 6 feet, there is no room for a dust bath, and this needs to be supplied about twice a week in a pan or tub; and when they learn what it means, they will hardly wait till it touches the floor before they are into it.

From the experience I have had with this system, and watching the fowls in the coops and those in my henhouse, I have come to the conclusion that the secret lies in the fact that the hens are always comfortable in the coops, no matter what the weather conditions are outside, providing they are kept supplied with dry litter. The small space is kept at a comfortable temperature by the number of hens in it, and there are never any drafts on them. I have found, by watching those in my henhouse, that a chilling wind will stop a hen from working and laying as quickly as anything I know of. It is plenty of fresh air, without drafts, that they want, with enough fowls together to keep the atmosphere comfortable; and I think this is the secret of Prof. Graham's success with his new house, as it is practically the Philo system on a large scale, with the principal disadvantages of the Philo system eliminated.

If I were building a house for 100 hens, should make the front 4 feet high, instead of 3 feet, as Prof. Graham has it, and put in a 12inch sash under the eave, and have curtains to put down over the 2-foot space when there was a chilling wind from the south or east.

I have a double-deck Philo coop which is open in the lower half during the day, and when there is a chilling wind from the south or east, the hens will not go down, but remain all day upstairs, doing nothing. It may be blowing a blizzard from the north, and below zero at that, but that will make no difference, so long as they are protected from the wind, and they will be down below working like good fellows.

J. STONEHOUSE.

## More Poultry Experience.

Editor "The Farmer's Advocate"

I would like to give my experience with profits on poultry. This year we had 50 hens. sold, 329 doz., at a fraction over 18 cents, \$59.50; eggs set, for table use, and packed, 98 doz., at 18 cents, \$17.64; total, \$77.14. We kept account till Nov. 1st, and 10 doz. were packed in that month, included in the 98 doz.; besides, 18 cents for the 98 doz. is a little below the average we sold for. And above that, we sold \$7.60 worth of old fowl and young, and about \$4.50 worth of chickens consumed at home, equals \$12.00, with about 75 hens to start this year. The main feed was buckwheat, and sometimes oats in the morning and corn at night, with all the coal ashes for grit they will eat, and occasionally a soft feed at noon; keep young hens. The barn is a long. old, tumble-down affair, with a lean-to, and the hens have about 12 feet off the cowstable and barn to kick through all day.

ANOTHER NEW BEGINNER.

# GARDEN & ORCHARD.

### Onion Culture.

Onions will grow on any ordinary soil, but a dark, rich loam, slightly inclined to be sandy, seems to suit them specially well. If the ground he very sandy, and rather dry, that is the kind of soil which the onion maggot seems to prefer for its destructive work. On the other hand, where clay is so stiff as to hinder its being worked up fine, the crop will not be so large as on mellower soil of the same richness.

Land intended for onions should not only be readily workable into fine tilth, but should also be rich and fairly clean. It should be rich not only because of being well manured the year the crop is grown, which of itself would not serve a very good purpose, but also from having had manure applied to previous crops. It is possible, of course, that ground might be too rich for onions, but, as fifty loads of manure per acre are recommended as a dressing for a profitable crop, it is not likely to be.

Again, as most of the labor of caring for an onion crop is taken up with weeding, it follows that land foul with weeds should be avoided. A field on which there has been a well-cared-for hoed crop the previous year is very suitable. In oniongrowing sections, it is common practice to grow this crop year after year on the same field. If this can be done without any  $M.6_{\circ}$ manured. not reachle reduction of yield. It is coming to be ized, however, that the danger from insects usease is greater than where rotation is Di.

### PREPARING SOIL.

e possible, it is well to apply manure and nder in the fall, though, having no manure time. I have been obliged to defer that

ready for sowing as early as it is fit to be hauled and spread; the ground is then plowed and harrowed, and afterwards it is worked very fine and smooth with cultivator, harrows, and plank drag or roller. Before sowing, all obstructions to the drill or wheel hoe, such as stones, sticks, corn stubs, etc., are gathered off.

#### SOWING.

A hand-drill seeder, sowing one row at a time, is used, regulated so as to sow about four pounds of seed per acre, in rows sixteen inches apart. The standard width for onion rows is 14 inches, but I have always sown a little wider. If there is a marker on the seeder, a straight start on the first row should be made, and, with care afterwards, straight rows can be sown throughout. Should there be no marker on the seeder, a light implement, resembling a corn-marker, can be used to trace lines for the rows. However it is done, it pays to have rows as straight as possible, and of even width. Some growers sow onion seed at the depth of an inch, but my preference would be three-fourths of an inch, or even less. I have known perfectly good onion seed to sprout well,

the place of roots, as I have fed no other green work until spring. The aim is to get the land and yet fail to come up, because of being sowed ready for sowing as early as it is fit to be too deeply. I usually roll with a land rober worked. The earlier, the better. Manure is first after seed is sown, to make the surface smooth and firm.

#### WEEDING AND CULTIVATING.

By the time the onions are up, the weeds will have appeared, also, and the wheel hoe is used just as soon as the onions can be plainly seen. The wheel hoe is a great implement for the work it has to do, and is the only one that can be reckoned essential for onion cultivation. By means of it, the whole surface of the ground up to within one-half of three-quarters of an inch on each side of the onion rows, is stirred to a depth of half an inch, and, if used once a week, weeds are held completely in check. Here let me digress a little to say that, contrary to common opinion, the longer weeds are left uncut, the harder they are to kill. Even purslane, that fat, juicy weed, dreaded of the gardener, will not survive cultivation given before it has had a week's growth, though after it has become thoroughly established, it will live through repeated hoeings. The wheel hoe should be used four or five times during the season.

The little strip of about an inch and a half



Upper portion of picture, photographed July 27th, 1910, shows onion tops in full growth; bulbs just beginning to form. Middle picture, taken August 28th, tops lopping and withering. Lower scene, Sept. 12th, shows onion-lifter; part of four rows as left by lifter, the rest raked four rows into one, and bushel of dressed onions, with space-11 feet-from which it was gathered,