

Work that Must be Done.

JULY.—VEGETABLE GARDEN.

Hoe the advancing crops, to kill the weeds and stir the soil; watch weeds narrowly, for they are rampant.

Plant a new crop of celery in rows, three feet apart, and six inches apart in the row.

Transplanting is best done in cloudy weather. Keep the plants wet. Puddle the roots. Much depends upon pressing the soil firmly against the roots.

Plant pickle crops early this month, as, also salads of all kinds, and radishes.

Plant beets and carrots for young roots, and sweet corn to supply the table late in the Fall.

FRUIT GARDEN.

When strawberries are entirely gone, weed the bed thoroughly. If new plants are wanted, enrich the soil between the rows and let the old ones run.

When raspberries cease bearing cut out the wood which bore the fruit, and train the new growing canes. They will bear fruit next season.

Raspberries may be stopped in their upward growth, by pinching, when at three or four feet, and blackberries at five or six feet. This pinching the tops will cause sidebranches to grow, and these are to be kept in control by pinching when they have grown as long as desirable. If well pinched this season the fruit will be more than double next year.

Thin out gooseberries the first of the month. Use the berries for cooking. Those left will grow the better.

FLOWER GARDEN.

The lawn must receive special attention. Mow when needed, and no oftener, and it is not generally likely to need it during a long continued drouth. Root out all coarse weeds.

Verbenas will have begun to run, and should be pegged down. Old hair-pins are good for this purpose.

Carnations should now be increased by layering. Ornamental shrubs may be easily propagated from the cuttings of this season's growth, set in sand soil under a well shaded sash.

Roses will need attention. Cut back the Spring bloomers. Shake off rose-bugs and use whale-oil soap for slugs. Do not be afraid to pluck the first flowers that bloom. The plants will, later in the season, be the better for so doing.

Hedging.

An Iowa farmer writes out his way of hedging with the honey locust, as follows, in the Western Farm Journal:—I have just been engaged in driving down a few stakes in the line of a young hedge, and drawing through the tops of the hedge plants a single wire, fastening it to the stake in the usual way. This young hedge was plashed by nicking near the ground and laying over at an angle of about forty-five degrees last spring. The object in putting the wire through it at this time, is to make it an effective fence, to enable me to turn cattle, sheep, &c., into the part of the corn fields already husked. Now for the exhibit of economy. One hundred rods of such fence as would answer the purpose of restraining my stock as well, would cost \$125 in cash. I find by careful estimates the cost of plants, of setting, of culture, of plashing, and of the one wire, and work to place it, is less than \$25, and the only cash expense of this is the one wire, and this was drawn out of a hedge row where it was no longer needed.

Mr. Chas. Trubner thinks it probable that not more than 10 per cent. of the fruit trees annually planted in the Western States live to bear a full crop. He tells Colman's Rural that one reason for this discouraging mortality is found in neglect of the simple precaution to wet the roots before setting, which causes the soil to adhere closely, so that they can begin feeding at once. He put out an orchard of 200 trees a month ago, using only a single bucket of water for all; still they are doing well, and he don't expect to lose one. He considers that subsequent irrigation is entirely unnecessary.

One-fourth each of sand, leaf mold, chip dirt and well-decomposed manure makes an excellent composition for putting your house plants in for winter.

Poultry.**Profit and Loss in Poultry.**

Poultry is a source of profit or loss, just as it is well or ill cared for. In this respect the business of poultry raising does not differ from other kinds of business. More depends upon the manager than on the breeds of fowls selected. There is difference in breeds, some being more profitable than others for eggs and market purposes; but all breeds have their good and bad qualities, and all are susceptible of profitable management. No breed, however, need be expected to yield profit or satisfaction if not properly cared for.

There are two great mistakes made by amateur poultry raisers, and by some professionals. Now and then one may be guilty of both mistakes, but the great majority, whether they have many or few fowls, are guilty of one or the other. Poultry, especially hens, are either too closely confined to be healthy and prolific, or are given a too free range, expending their energies in rambling and making nuisances of themselves. In the latter case they may be healthy, but will not do as well as if kept within reasonable bounds and made to acquire more domestic habits. The more they ramble the wilder they get, and begin to more and more approximate wild fowls.

Most farmers give too free a range to their poultry, especially in the summer. They may have a miserable place to root in, summer and winter, and from this fact suffer during the night time unless they get disgusted and show better sense than their owners by taking to the apple trees or other outside places. But in the daytime they roam fancy free, often making serious depredations in the garden, hiding their nests under the fences and bushes, and generally making themselves as happy, mischievous, and unprofitable as possible. Smothered or frozen in winter, they consume all their vital energies in sustaining life; and roaming, scratching and foraging at large in summer, they have but a small amount of surplus vitality to expend in eggs. So poultry kept in this way is not only unprofitable, but too often becomes a nuisance at home, and a pest to the neighbors. We often hear of the unprofitableness of barnyard fowls. Give the best breeds such treatment as this for a few years and they will become common barnyard fowls. This is the way to make them. But give them generous food the year round, warm and airy quarters, plenty of sunlight and ample grounds of their own to roam in, and they will improve rather than degenerate, and be a source of pleasure and profit instead of loss.

It is an almost fatal mistake to keep fowls in too confined quarters. They must have ample and airy, clean and sweet quarters to stay in over night and shelter them from storm. These conditions are demanded by all kinds of higher animal life. The fact that human beings are crowded together in close, unventilated rooms, affords no valid reason why animals or fowls should be uncomfortably crowded. In the case of the human bipeds, no one may be interested in the profit to be derived from them, but in the case of the feathered bipeds the owner is directly interested. It is for the benefit of his pocket to keep them as healthy and thriving as possible, that he may get the largest profit out of them. He must give them plenty of breathing room, for nothing is of more importance than air, and keep them every way comfortable and satisfied.

All fowls need space to roam and forage in during the day, in summer time. Fifty hens ought to have an acre devoted to their use—certainly not less than half an acre. And this space should be adapted to their wants and peculiarities; have open, sunny and sheltered places, cozy and shady nooks, and if it can be stocked with grasshoppers and other insects, so much the better. If these are not present, animal food must be supplied, as well as grain. There should be grass, and other green food may be cultivated for their stuff in their grounds, but they allowed to help themselves. Thus kept and cared for as they should be, they will not only yield the most profit, but the most palatable and nourishing eggs and flesh.

For a feed for young chicks I give hard boiled eggs for the first few days; after that I take raw eggs and mix with meal and bran to a stiff dough, adding a little water so it will not be so sticky. They are very fond of this and grow nicely.—H. K. in Poultry Nation.

GLEANINGS.

From her 35,000,000 acres England realizes an annual product of the value of \$150,000,000.

The cost of commission, handling and ocean freight on dressed beef sent to English markets is 2½ cents per pound.

My past year's experience just confirms what I have always thought: that if you do not kill weeds at the right time—that is, when young—you will have to spend a great deal more time and money than you ought even for experiments.

In Pennsylvania the owner of property on which trees are planted along the highways has his road tax reduced at the rate of \$1 for each four trees planted. The trees must be living one year after planting, and be well protected from animals. Injury to such trees is punishable by fine.

S., writing from Syracuse, N.Y., says: This section can scarcely calculate upon ordinary half crops of grain and grass. Nothing so bad has ever been experienced in this county. I venture to predict that hay will sell for \$20 per ton in our market next winter.

An Illinois farmer writes: Early sown wheat is fine, but as late sown wheat got above ground the locusts appeared, and are still eating it. I think they have destroyed one-fourth of the wheat on last year's breaking, or about twenty per cent. of the wheat generally.

That the quality of hay is very materially dependent on the time of cutting is well known to experienced farmers. The longer grass is left standing after it has blossomed the greater is the increase of indigestible woody fibre, and the greater the diminution of soluble nutritive constituents in the hay which it yields, and precisely the same remarks apply to the clover crop.

It has been found in England, from repeated trials, that it takes 100 lbs. of turnips to make one pound of mutton, when the turnips are fed in sheds under favorable conditions; but fed in the open air it will take 150 lbs. to produce the same quantity. Here is another argument in favor of shelter for domestic animals.—[American Cultivator.

A writer in the Country Gentleman remarks that in his experience, whatever mode is adopted for destroying the potato beetle, keeping the weeds down is one of the essential elements of success. He found some eggs fastened on the under side of a pigweed, also on blades of grass. In destroying the weeds, therefore, we are preventing a large increase of slugs.

About 500,000 tons of manufactured manures, containing a soluble calcic phosphate, are annually sold in Great Britain. The manure termed "superphosphate of lime" was at first made by acting upon bones by oil of vitriol; but it is now almost altogether prepared by mixing sulphuric with bone-ash, bone-black and various mineral phosphates.

The mania for nitrate of soda will cause ultimate loss to many a farmer who is not aware that he should concurrently apply in the subsoil plenty of phosphates. Its tendency to make crops look green and promising deludes many a farmer, who thus gets color and often mildew, instead of healthy increase. Its price will come down as rapidly as it has risen.

The period at which clover is cut for hay materially influences its quality. Thus, according to Wolff, the amount of nutritive substances in red clover at beginning of flower is 11.26 per cent.; red clover in full flower, 13.04 per cent. Red clover hay, cut at beginning of flower, contained 55.43 per cent. of nutritive matter, while the same cut in full flower contained 46.07 per cent.

CLOVER.—The writer of Wanshaken Farm Notes says: Whenever we seed down we shall use twelve pounds of clover seed to the acre, along with the grass seed, with the expectation of reward—not only in the cut grass, but in the conserving influence of the clover roots, their physical action, and other beneficent effects on succeeding crops.

DANGER OF EATING CUCUMBERS.—Dr. Leidy, of Philadelphia, has discovered that cucumbers are liable to be infested with tape-worm. At a meeting of the Academy of Science he exhibited a specimen of tape-worm taken from the inside of a large cucumber.