

Two rows of black raspberries may follow—one of Doolittle for early, and one of McCormick for late. If the black raspberries are not favorites, then plant only one row and two of red.

One row of blackberries will answer. The Kittatinny, probably, for all locations, is the very best, being large and of excellent quality, and the plants are hardy as any.

Entomology.

THE BIRDS.

We are debtors to the birds even in winter. The Blackcapped Titmouse, Blue Jay, and several woodpeckers are busy searching for the eggs and larvae of insects, and the sparrows are eating up the seeds. With each returning spring come the flights of migratory workers. The plowed fields are flushed with the breasts of the robins, and shining with the brown backs and scarlet crested wings of the blackbirds. Every plant-eating insect, in the form of eggs, larvæ, chrysalis, or perfect insect, destroyed in spring, saves the crop which it is liable to attack, whether grain or fruit, from the ravages of hundreds and perhaps thousands of destroyers later in the season.

Go out, if you will, and watch them awhile each day. Certainly nothing could be more advantageous to the reputation of the birds, and nothing more likely to bring large money returns to mankind in the end. For, if you look at the matter thoroughly, you must become convinced that birds are indispensable to successful agriculture or horticulture.

Dr. Jenks, of Massachusetts, demonstrated by actual dissection, to ascertain the contents of the crop, that the food of the robin during March, April, May and part of June, consists entirely of insects and their larvæ—mostly of very destructive species. During the latter part of June, and the months of July, August and September, there is a mixed diet of fruit and insects, the insects being in large preponderance. After July the fruit is almost entirely wild, and even in June and July the bird does not go to a distance to obtain the tame fruits. Late in the season their food is grasshoppers or similar insects. Dr. Brewer noted a pair of robins which fed their young until they left the nest entirely on cut worms. The same fact has been observed by other eminent authorities. The domestic pigeon feeds its young very largely on canker worms, and no doubt the turtle dove and wild pigeon have been doing the same great service, and have been blindly considered by most people as only good food for shot.

The blue bird eats all kinds of insects, and has a preference for some of the most destructive kinds, as the codling moth and its larva, canker worms and caterpillars. In the crop of an Oriole were found three hundred grains of weevils.

Last June I observed the rose-breasted Grosbeak engaged in destroying potato bugs. Skimming lightly over the plants he caught the insect, then alighted on the ground to finish it. Several gentlemen of my acquaintance, whose farms are frequented by this bird, have noted that he is diligent in the work of destroying this insect.

A pair of Golden Orioles, which I watched a year ago last summer, visited their nest with insect food twenty times an hour, and they worked from the earliest morning light until dark in the evening.

The robin visits his nest about as often, and generally with a beak full of insects. A pair of king birds came over twenty times an hour, and usually with several insects at a time.

The woodpeckers visit their nests much oftener; indeed there seems to be a continuous stream of provisions passing in at the door of the dark nest in the trees.

This direct testimony is not the only evidence in favor of birds. In Europe, where the whole subject has been more deeply studied than here, it has been observed that in certain districts where there was a marked decrease in the number of birds, there was a marked and dangerous increase of destructive insects. Vast sums of money have been expended to arrest, by hand-picking the insects, the work of destruction in valuable forests, but without avail. And it is well known that a reasonable number of certain birds, native to the country and feeding largely on the destroyer, but sadly thin in numbers, would have prevented loss.

There has lately been a plague of insects in Paris and the adjoining country. This has been attributed by French observers to the

destruction of birds during the siege. Facts bearing on the same point, and equally conclusive, have been observed in our own country. Wherein, then, lies our remedy against these insect foes which threaten the forests, fruit and grain crops of some parts of our country?

A thousand and one plans of extermination are proposed and tried, and still the enemy gains upon us. Our real remedy plainly lies in an increase of birds. To accomplish this there is but one way; better protection, a more tender care for the life of the bird. It is an idle fear that even with the best protection that can be given, they will increase beyond the real demand for their services.

There are so many dangers that beset, so many accidents that may befall the young bird, that is not often that a pair of birds are able to rear a whole brood. There are snakes and wild quadrupeds ready to devour. There are a few kinds of birds, very useful themselves at other times, which do not object to eggs or young birds.

A great many, especially in nests upon the ground, are lost during fierce storms. But perhaps there is no other enemy which so seriously threatens the bird race as the cat; it is searching night and day, and eggs, young birds or old ones are equally acceptable. One often sees half a dozen or more lean, half starved creatures at a single house. It certainly looks as if birds would not thrive well about such a place.

The horticulturist, whether he will or not, is one of the natural protectors of the birds. The deciduous forest trees and evergreens, the fruit trees, shrubs and vines are retreats and homes for the birds.

It is feared that by an increase of birds a few more cherries and berries will be lost.—We can raise more and easier than ever before, for we shall not have to contest every plum and apple with the enemy. It must be plain to every one that the injury which birds have done to fruit, during the last twenty years, would not equal the loss by the codling moth in a single year.—*Ex.*

Flora's Jewels.

We here give a small representation of Mr. Vick's latest charms. The beauties of the picture are but dimly displayed by this little cut, but you will no doubt be able from it to form some idea of the original. We have great pleasure in informing you that we can supply the chromes to any of our subscribers who will take the trouble to get us five new subscribers. If you wish to ornament your parlor with something really artistic and beautiful, spend a few hours getting us five subscribers; send us on the five dollars, and you will receive your magnificent picture, and the subscribers will thank you for inducing them to take such a valuable paper. The picture is known as "Flora's Jewels."



FLORA'S JEWELS.



ANNUAL FLOWERS.

Annual Flowers.

We would call the attention of those wishing to procure choice flower or vegetable plants to Mr. Brydges' advertisement in this paper. Mr. Brydges packs the plants in small boxes, using moss to keep them damp; in this state he is enabled to send them to any part of the Dominion, as when thus packed they will safely keep for many days. He has sent some even to New Brunswick packed in this manner.

PROFIT OF CHERRY CULTURE.

A California paper says: Some of the cherry trees of Mr. Bidwell's orchard, in Butte Co., yielded 8200 to the tree this season, the fruit selling as high as sixty cents per pound in San Francisco.

TREE AND NICE.

In reply to an enquiry about saving fruit trees after having been gnawed by mice, &c., I will give my experience:—My father had a young orchard of 100 trees, nearly all of which were girdled by mice and rabbits one winter. As soon as the ground was thawed sufficiently, we banked them up with earth and nearly all lived and did well, a nice healthy bark forming over the wound.—*W. H., in Iowa Homestead.*

AMMONIA FOR VERBENAS.

The sulphate of ammonia is an excellent manurial liquid to apply to verbenas or any other flower, giving to the foliage a dark green, luxuriant and healthy appearance. It is economical, clean and easily applied. Prepare it in the evening before using, by dissolving one ounce of ammonia in two gallons of water. It may be applied once a week with safety.—*Southern Farmer.*

The Horse.

LARGE OR SMALL TEAMS FOR THE FARM.

A small team, where but one is used, will not do. Deep plowing or sod plowing is too heavy for it. We have known instances not a few where a pair of light horses were exchanged for heavier from a matter of sheer necessity.

But shall heavy horses then be secured?—We have known them to be exchanged for a lighter, not a light team. Strength, activity, endurance, these are qualities in a horse that are wanted, and a good frame to hold them and give them full play.

It is the medium sized team, sufficiently heavy to carry a good load, to plow sod without flinching or succumbing, that is the most profitable—horses of mettle and strength, yet tractable, sure and quick of foot—that will do much light work in a day, and yet answer for heavy.

Each one knows, or should know what his work is, and secure his team accordingly. If there is a large proportion of heavy work, he wants a heavier team; when there is much light work, a lighter. But in all cases, he must see to the treatment of his team—that it is not abused or over-strained. Hard work, and hard, that is, strong food, will soon wear out a horse. If to this is added neglect or abuse, there will be but about half the service gotten out of the team. They will die at 16 or 18 years, and fail sooner; whereas we have known horses to live to the age of 30 years and more, and do a fair day's work.

A heavy horse is generally a slow and unwieldy horse, good enough for heavy drafts; but there it ends. The most of the farm work is not of the heaviest kind, and a spry, rather light horse, will do it cheaper than the heavy Percheron or cart horse; beside, he is easier to handle. But for a single pair, as we have said, a light horse will not do.—Avoiding extremes is the best doctrine. Secure a good sized team, spry and mettlesome, yet easily managed and safe, good constitution, a good keeper, good temper and well trained.

Such a team is worth something; it will cost something—time, trouble and expense in securing it, but it will be a most effective engine in the operations of the farm. Tested well, it will do the work fully and effectively, and last a long time. There is a great improvement to be made in securing our teams as we want them. A farmer cannot afford, especially in a crowded time, as in harvest or seed time, to be annoyed with baulky or unreliable horses. They must be up to the work always and as wanted. And so on the road. We get our horses too much at hap-hazard, and fear to lay out a little extra means for superior teams. It requires but a little more to get a good satisfactory team, costing less to keep doing more work, and doing it the better—a team that with good treatment will last twenty-five years, and save you a world of aggravation with much needless expense, beside endangering limbs, and perhaps life.—*Ex.*

HORSES.

This summer my horses got badly run down. We fed them liberally, but they did not eat well. They had no appetite, no digestion, and no strength and spirit. They came home at noon and night fagged out, and their night's rest did not refresh them. I sawed a barrel in two, and placed the ends on the platform of the pump. These are for watering the horses. Into one of them we put a pailful of corn-meal and mixed it with the water. The horses at first did not like it, and would only drink a little when very thirsty. After they had drunk what they would they were allowed pure water. In a very few days, however, they drank this corn-meal soup with a relish, and in less than a week there was a decided change for the better in the appearance of all the horses.—We do not let them eat the meal, but merely let them drink the milky water. I have no doubt it is as good for them as a plate of good soup is for a tired and hungry man before dinner. It seems to stimulate the appetite and aid digestion.

It is a capital thing for cows as well as horses, but it is not so easy a matter to give it to the cows, as they soon learn to stick their heads in the water almost up to their horns, to get the meal that settles at the bottom. It is necessary to have a large trough with a false bottom.