

## FARM AND GARDEN.

## THE AGENT AND THE FARMER.

BY A. C. BELLAW.

For agents it wasn't an extra day,  
Only forty had come and gone away,  
But the farmer's wife was short of breath,  
And the farmer was nearly talked to death;  
Agents for fences, churns, and trees,  
Agents for books, windmills, and bees,  
Agents for gates and lightning rods,  
Agents for plows and rollers for cloids,  
Agents for spectacles, grindstones, and churns,  
Agents for soaps and ropes for buns.  
But the last had gone, and the day was late,  
When lo, another man stops at the gate,  
And craves the boon of staying the night.  
The farmer looks, with his teeth shut tight,  
"Are you an agent?" "Well, on my word,  
I am an agent of the Lord!"  
"Well then, come in, but if you've on hands  
Any new process, or short-cut plans,  
While you're welcome here to-night to rest,  
Let me say at the start that I don't invest."

## THE FLOWERS IN AUGUST.

By a Contributor.

Wherever the eye may now rest in the garden, it will surely fall on bright, sweet flowers. The verbenas and phloxes are covering the earth like a carpet. The zinnias, petunias, asters and balsams, in their various shades and colors, form a bewildering mass of beauty; the gladioli seem like an army with banners, the colors of which represent every nationality. In making our usual collection for the breakfast table, we hardly know where to commence to cut, because of the great profusion that surround us, and it will be a far more difficult task to tell where to stop, so much there is to admire, so many beautiful forms and colors from which we do not want to be separated. A long row of sweet peas attracts us by its sweet perfume. We must gather a large bunch, and when done our bouquet is complete; for nothing can add to their beauty. On the contrary, whatever is put with them sullies their loveliness. How pleasant, after breakfast, to take a quiet stroll into the garden before the sun becomes too scorchingly hot to be endured, and pull up the weeds that have been pert enough to put in an appearance in the beds and borders; to stake up our beautiful lilies, just coming into bloom, to admire their exquisite forms. Some of them we have had for years, and for as many years we have been disappointed in not seeing them flower. At last here is the honored member of the family, the Liliom Brownii, with two immense trumpet-shaped flowers, dark brown on the outside and creamy white within, a more noble and beautiful object we have never seen in the flower garden. It is doubly welcome now, because we are more than paid for our years of patient waiting and repeated disappointments. Besides, we have the consolation of having accomplished our object, and have the plant well established, and a fair promise of its future usefulness. Other lilies that have always pleased us are pleasing us again. The lancifolium, roseum, rubrum, punctatum, album, and their many varieties that have been raised from seed, besides the earliest and by far the most desirable one of the class, the Procor, are full of bud and promise. All these will require attention, but attention will only be love, rightfully bestowed when paid to plants. The actual labor required to keep plants in proper condition and the grounds free from weeds the remainder of the season will be very light. Ten minutes' work will keep everything in order in a small garden, and the slight exercise will be the best thing to develop your muscles and improve your digestion. Now stimulate all flowering plants to the utmost. One

can hardly comprehend the wonderful effects of liquid fertilizers when applied to the soil of flowering plants, until they behold the rapid growth of their leaves and branches, and the luxuriant clusters or buds and blossoms that spring forth on all sides.

As this month is usually a dry and hot one, it may be necessary to resort to artificial watering in order to get the best results from our plantings, but it is better by far not to water at all, unless it is done properly. Plants should always be watered in the evening, after the sun has ceased to shine on them, when it will be of great service to sprinkle water over their leaves likewise. When watering is once commenced it should never be abandoned till rain falls in the requisite quantities, for a plant which has been left wholly to nature will sustain drought far better than one which has been artificially watered. Water, too, should always be administered very copiously, as the amount of evaporation daily going on at this period is astonishing. It should, therefore, be rain-water, or that which has been exposed to the sun's influence and not from a spring, as such water has a great tendency to harden the ground. To avoid the latter circumstance, moreover, water should be applied to each individual plant through the spout of a pot, and not poured over a whole bed with a rose. Where water is applied to the surface of a bed through a sprinkler or rose, the soil will soon become baked to a crust nearly as hard as concrete. This will be avoided by watering through the spout alone; but where it does occur, it is necessary that the earth should be loosened and stirred frequently with a small fork, to render it previous to water. The importance we place on this subject may seem overdrawn, not so, however, for our experience and observation has taught us that mere plants are injured or spoiled by injudicious watering, than from all other causes combined. Slight surface waterings are worse than useless, as in a dry time, plants by their roots are constantly searching for water. Therefore, when the surface is wet, say to the depth of half an inch, the roots will immediately change their direction, turning upwards where there is an apparent supply; this is no sooner reached than the heat from the sun bakes the surface of the soil in which are the true roots of the plant to such an extent that the roots are destroyed at least the spongioles or mouths of the roots, and vegetable growth must cease until new feeding roots are formed. Excepting in small gardens, it is much the better plan not to resort to artificial watering, but to keep the surface of the ground as loose as possible, for two reasons. First, it will prevent, in a great measure, evaporation; in the second place, the dry surface will cause the roots to go downward where there is a supply, which, if not copious, will be sufficient to keep the plant in a healthy state, if not in an active growing one. It will be in a condition when the rain does come to carry on the work for which it was created, the development of flowers and fruit.

For the CANADIAN FARMER.

## GROWING WHEAT AFTER WHEAT.

As no grain is more valuable or nutritious than wheat, it is a natural sequence that none is more exhaustive of the expensive elements of soil fertility. The constant demand of the wheat plant is for phosphoric acid and nitrogen. Even in

virgin soil these are seldom in large available supply. Wheat after wheat uses up these valuable elements of fertility more quickly than any other grain crop. After a few years it becomes impossible to grow wheat crops in succession without an intervening season during which the land lies fallow. By taking two years to grow a crop of wheat, this grain may succeed a long time after the virgin fertility of the soil is destroyed. But this is an expensive and wasteful process. Part of the excess of fertility accumulated while the land lies fallow is lost. The labor of cultivation for so long a period destroys all hope of profit unless this labor is made to serve some other purpose than making a wheat crop.

The summer fallowing system of growing wheat has been largely practised in England, but is less so now, as the competition with other countries has so reduced the price that the large amount of labor it demands cannot be afforded. It is less likely to be popular here for the reason that American farmers in many places have learned that applications of commercial fertilizers, especially phosphates, will, to a great extent, take the place of the summer fallow. In fact, the tendency now is to give the plant too little preparation of soil and to rely exclusively on phosphates, sowing the wheat with very slight preparation of seed bed after a crop of barley or oats. These preceding crops are usually worth as much as wheat and often even more, so that the advantage of growing them rather than leaving the land naked through the summer is very apparent. It is true that this "runs the land," but exhausting fertility is the farmer's business whether the farm well or ill. Only we must not forget to add that the aim of the good farmer is to restore its fertility as soon as possible by heavy applications of manure.

Of late years many farmers have learned that by the liberal use of phosphates, wheat may be made a fallow crop for wheat, with as good results as sowing after oats or barley. In one important respect wheat is a much better crop than oats to precede wheat, as it allows two or four weeks longer time for preparing a seed bed. In midsummer whatever green vegetation is plowed under rots so rapidly that this difference in time of plowing makes an early turned wheat stubble almost equal in tilth to an ordinary summer fallow. It is not as rich in either phosphate or nitrogen, for the grain crop just taken off has partially exhausted those elements. But there is not much difference in fertility and probably none in soils, otherwise equal, one of which has just borne a wheat crop and the other oats or barley. So far as fertility is concerned there is no more impropriety in growing successive wheat crops than successive crops of any other grain. In any case land thus treated must require frequent applications of manure in some form to produce a crop.

One objection to growing successive wheat crops consists in the fact that it prevents the farmer from gaining the advantage which comes from frequent seeding down with clover and grass. Whatever the cause, one year's growth of grass on a field is so great a conservator of its fertility that with this advantage the farmer can keep his land in condition with much smaller applications of manure than would otherwise be needed. The grass roots reach every part of the soil and store its available fertility for immediate use when

plowed under. Cultivators who grow special crops, such as seeds or tobacco, on high-priced land, find that it pays every few years to seed down, though it be for less than a year. The land gets advantage from the decay of the soil which can only be obtained at much greater expense from heavy applications of manure. This is an expense which the wheat grower can afford.

The worst evil, however, in growing successive wheat crops is the tendency of this policy to fill the land with the weeds, and the crop with the insects that are most injurious to the wheat grower. Nature seeks to represent the excess of wheat that man has stimulated, and to fill the soil with something that takes a different kind and degree of plant food from the soil. Western wheat growers have already in many places stuck on this rock. Successive failures of spring wheat in various sections show that the land is becoming exhausted, and that if wheat is to continue to be grown as heretofore, it must be by adopting the methods which Eastern farmers have long found to be necessary.

## THE TURNIP FLEA BEETLE.

The following Bulletin of the New-York Agricultural Experiment Station is issued under date of Geneva, N. Y., July 9th:

The turnip flea beetle, *Naltica striolata*, attacked our young plants of cabbage, cauliflower, turnip and radish, doing much injury by eating from the leaves. We have made many applications with the view of discovering the most efficient preventive against its injuries. Among these may be mentioned tobacco water, cut tobacco leaves, kerosene soap emulsion, soluble phenyle, buhach powder and air-slaked lime. The date of each application and the proportions of each used, &c., were carefully noted, and the plants upon which the applications were made were examined daily, and the numbers of insects found, counted and noted in comparison with the number found upon plants which had received no treatment. We will not burden our readers with details but will proceed at once to results.

A saturated decoction of tobacco water is very efficient in keeping off the insects, when frequently applied, but its strength seems to volatilize quickly in the sun, at least our figures seem to show that little, if any benefit comes from the application after two days. Our decoction was made by soaking tobacco leaves in cold water for twenty-four hours, when the water was poured off to be used, and was applied to the plants by means of the garden sprinkler.

We found the kerosene emulsion diluted with eight parts of soft water to be very efficient, but its effects are little if any more lasting than are those of the tobacco water, and when frequently applied it evidently retarded the growth of the plants. This emulsion is made by combining one gallon of kerosene, one gallon of water and four pounds of common yellow bar soap, heating the mixture, with occasional stirring, until the mass becomes homogeneous, and then continuing the stirring until it becomes cold. This preparation is entirely permanent and may be diluted to any desired extent by the addition of rain water.

TO DRY CHERRIES AND PLUMS.—Stone them and half-dry them, pack them in jars, strewing sugar between each layer. They are very nice either in pies or as sauce.