

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

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who may make the regulations describing the manner in which live stock, meat, poultry, eggs and wool shall be graded and branded or marked. It is to be hoped that the Act is enforced and that regulations regarding grading may be speedily made and the whole put into effective operation. Nothing will so work for a uniform output of live stock, meat, poultry, eggs and wool and a place on the markets of the world as will an efficient system of grading. The Minister of Agriculture is to be commended upon this beginning toward systematic control of the live-stock output of our farms. Let grading come immediately.

Nature's Diary.

A. B. KLUGH, M. A.

A very common and very interesting plant is the Evening Primrose. It has a wide range, being found from Labrador west to the Rocky Mountains and it blooms from June until October.

This species has an erect, often wand-like, stem from two to five feet in height, which is leafy to the top. The flowers are yellow, about an inch and a half across and are borne in terminal leafy-bracted spikes. The corolla has four spreading petals. These lemon-yellow petals are broad, with the outer margin notched. There are eight stamens which are set one at the middle of each petal and one between each two petals. The pollen is discharged in cobwebby strings. When the flower first opens the stigma is egg-shaped and lies below the anthers, later it opens into a cross and hangs off at one side of the anthers.

As we see the Evening Primrose during the daytime early in the season it presents a somewhat faded appearance, as there are no wide-open flowers present during the sunny hours. But if we watch it in the evening we shall see the sudden and interesting manner in which the buds open. A flower which is about to open shows a long yellow tube which pushes up between two of the sepals. Usually about sunset the petals begin to unfurl. They are wrapped around each other after the manner of a furred umbrella so that one edge of each petal becomes free first. Gradually the sepals are pushed downward and the petals suddenly flare open. Three or four flowers may open on a plant during an evening, and the time which they take to unfold varies from two minutes to half an hour.

The flowers of the Evening Primrose are pollinated by moths, as we might infer from the fact of their opening at the hour when these night-flying insects are on the wing. If a flower is fertilized it closes in the morning and does not open again, but if it is not fertilized

it remains open during the next day, and is visited by butterflies and bees. Only insects with long tongues can reach the nectar at the end of the long tube in which it is secreted. Occasionally a hummingbird takes a sip of the nectar of those flowers which remain open during the daytime. Later in the season the flowers of the Evening Primrose remain open all day.

Many species of moths play the part of pollen carriers for the Evening Primrose, but there is one species which is very intimately associated with this plant. We often notice the petals with holes cut in them and when we find the insect which is feeding on them we see it to be a little green caterpillar. When this caterpillar becomes mature it descends the plant, burrows into the ground, changes to a pupa, and thus remains until the following summer. It then emerges as a very beautiful little moth about an inch across, known as *Alaria florida*. The front wings of this moth are rose-pink, slightly mottled with lemon-yellow and they have a lemon-yellow outer border. The hind wings are whitish and the head and antennae (feelers) are pink. This little moth is the special pollen carrier



Evening Primrose.

of the Evening Primrose, and during the day it hides within the partially-closed flower. As the fading petals of the Evening Primrose turn pinkish this moth is protectively colored when on such flowers and the lemon-yellow borders of the front wings render it equally hard to see when on a newly-opened flower. Thus the moth in its adult stage pays, by the transferring of pollen, for the damage it did to the petals when in the larval stage.

The seed-capsules of the Evening Primrose are long, green and four-sided. In winter they stand like vases with gracefully flaring tips along the wand-like stem. The seeds are shaken from these vases by the winds of autumn and early winter.

This plant is a biennial and during their first year the plants form flat and symmetrical rosettes, which are thus easily protected by the snow. During the next spring the stem appears from the centre of this rosette.

Where We Get Education.

BY ALLAN MCDIARMID.

In listening to a conversation recently between two men, I heard one of them ask the other where he had received his education. The man questioned seemed a little uncertain as to his reply, and then said that he wasn't very sure as to just where he had learned what little he knew. He said he guessed he had managed to pick up a small amount of knowledge in almost every place he was ever in. "If you mean to ask what school I attended I can tell you that," he went on, "but I always looked on my school education and my college training as a very good way to make a beginning in the attempt to learn the lessons that Life can teach us, and nothing more."

What we get in this way is a good basis to build from and pretty necessary for the majority of men and women, although some well-educated people have never seen the inside of a school building. But my idea is that one should acquire the ability to read and write their language in school up to the point where it will become a pleasure to continue their education along these lines, so that they may be led into fields of labor and usefulness that would have otherwise remained beyond their reach. As a farmer I have discovered that Old Mother Nature will teach us as fast as we develop the ability to take it in, if we give her the opportunity. All we have to do is to keep our eyes open and she will give us a lesson every day in the week, in the development of Life and the changes and progress that are brought about by way of evolution. We might read about these things in books till we were blind and never get the understanding

of them that we do when we see the whole thing worked out before our eyes. And when we work in partnership with Nature, as the farmer is compelled to, we have these things impressed on us in a way that makes it impossible for us to forget them. To live and accomplish Life's purpose we must learn from Nature's book. She goes hand in hand with another of our teachers that we call Experience. Together they have taught some pretty well educated men about all they know. The old saying is that "Experience is a dear teacher, but she keeps the only school that fools will learn in". And I guess no one will deny the fact that we are all fools to a greater or less degree, at least until Experience has had us in hand for a few terms. She comes to us in our association with our fellowmen and it is here that she gets in her finishing touches. No man can be called educated who does not come into regular contact with others of his kind. It has been said that the proper study for mankind is man, so if this is true it is necessary for us to put ourselves in the position where we will acquire the knowledge that comes from conversing with, and observing, the rest of mankind. It is right here that the ordinary country or city school gets in some of its best work. I have often said that the lessons I learned outside the school I attended in my young days were worth more to me than those I got within its walls, for the reason that nowhere will you get your weaknesses or peculiarities more frankly ridiculed than among your schoolmates. The qualities of courage and endurance are apt to be developed to a considerable extent as well, on the school play-ground, and it's at this time in one's life that any impressions made are likely to remain and influence one's actions in the future years. Of course, teachers have their influence over the lives of the pupils as well, and according to their character will this influence be good or bad. I have known pupils who never recovered from the effects of a year under a nervous, ill-tempered teacher, who made up in punishment and abuse for his lack of ability as an educator.

Another means of education that I have not mentioned is to be found in the Church. In the past, man's moral and religious training has been brought about through the pulpit to a greater extent, probably than by any other means. Its influence has been felt in the world for thousands of years, though perhaps not always along the lines of progressive education. Its place in the world to-day is of importance in so far as it continues to be an educational force in the community in which it is located. But if its development does not keep step with the times its influence is soon weakened. A church that does not move forward with the years cannot fulfil her mission as an educator, and may as well close her doors. The forms of religion do not interest the world as they did at one time. It must be practical in every-day life. And the preacher should be to the older members of his congregation what the teacher is to be the children in the school, that is, a source of knowledge as well as discipline.

Two other means of education should not be overlooked. They are books and newspapers. One would think that once the ability to read had been acquired the pleasure to be had from books would be inducement enough to make anyone keep up the habit. But a large percentage of the people of this country, especially among us who spend our lives on the farm, do not take advantage of the opportunities along this line. If they knew the pleasure and profit that they might have through continuing their education by means of the best books that are to be had so easily at the present time, they would hardly neglect the matter as so many of them do. It's one way of becoming "the heirs of all the ages", when our dowry comes to us in the form of books.

Newspapers are not neglected to the same extent. Almost all read them, and as a rule are unconsciously getting an education that is affecting their character and influencing their actions. As an educator the newspaper has a pretty prominent place, and on the whole its teaching is what might be called "sound doctrine". This has been more noticeable since the war started. One other process through which we may be educated should be mentioned. That is Travel. In looking at this subject from the standpoint of a farmer it is not surprising that I cannot speak from an unlimited experience as to the value of "seeing the world" as an educator. Farmers do not travel. At least not very much. Their horizon comes down pretty close to them on all sides. If we would "get up and get out" say once a year, it would do more to clear the cobwebs out of our brains than any doctor's prescription or patent medicine. If we're only going through this world once we ought to take a look at it in the passing. It costs good money to travel, we have to admit that, but so does any other part of our education that is worth having, and what's more, there's a chance that when we have to say good-bye to this old world we may take what we've learned along with us, but it's a sure thing we'll have to leave our money. And no doubt we'll find then that we have to start in on a course in some of the higher branches of knowledge, on another planet, maybe, where our money wouldn't be of much account, even if we had it.

Food Controller Hanna says that Hannah of the household must "can" canned goods until after October 15. It is too bad to force Hannah to do extra cooking before the holiday season is over, and besides she will say, "we are supposed to save coal." However, a good cook is of more use in the home than a can-opener and this order may increase the number of the former and cut down the demand for the latter.

Influenza usually attacks early in the autumn, bronchial with irritability, the disease in the liver, the art is liable to

Causes.—It is often in been exposed parently upon any seasons or to but is more Sudden change ment of the predisposes alone will not contract the to the speci conceded that air and profl its appearance nor their at agion.

Symptom catarrhal con (a shivering is a dry, star a redness an nostrils; a w 103 or 104, a heit. There ing but usual at first water become infec face. There inability to causes acute ous, painful a The pulse is v The mouth is well marked. by a gulping of some of t quidding of are usually c mucous, the the weakness often appear lations becom to move by joints cause.

Treatment It is somewhat treatment sh any distressi support stren roomy, well- Pure air is es body should He should be oats, bran, li and hay, and water. It is reach it at w he appears to into his mou by holding hi a little carb added, contin three times a charge and poultices of the throat plication of a monia, oil of ping with fl throat should sore, they sl times daily a Constitution allying the three drams fifteen grains be given by spoon, as the and on accou ous to atten stimulants as nitre or three equal quanti syringe every

If constip ministering a tions of war gatives such petite remain gruel should equal parts of bicarbonate doses three given out of tion. When arise, the ser